

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS

Eastern Division

MRS. HAZEL JACQUES, :
Special Administrator of :
the Estate of KENNETH :
JACQUES, Deceased, : Case Number:
Plaintiff : 87C3964
vs. :
KEENE CORPORATION, : Judge Holderman
et al., :
Defendants :

Deposition of BARRY IRA CASTLEMAN,
Sc.D., taken on Thursday, January 3, 2002 at
10:30 a.m., at the Law Offices of Tydings &
Rosenberg, LLP, 100 East Pratt Street, Baltimore,
Maryland, before Deborah C. D. Shumaker, Notary
Public.

Reported by: Deborah C. D. Shumaker

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<p>1 APPEARANCES:</p> <p>2</p> <p>3 ROBERT W. QUEENEY, ESQUIRE</p> <p>4 McBride Baker & Coles</p> <p>5 500 West Madison Street</p> <p>6 40th Floor</p> <p>7 Chicago, Illinois 60661-2511</p> <p>8 (312) 715-5723</p> <p>9 queeney@mbc.com</p> <p>10 On behalf of the Plaintiff</p> <p>11</p> <p>12</p> <p>13 MATTHEW J. FISCHER, ESQUIRE</p> <p>14 Schiff Hardin & Waite</p> <p>15 6600 Sears Tower</p> <p>16 Chicago, Illinois 60606</p> <p>17 (312) 258-5591</p> <p>18 mfischer@schiffhardin.com</p> <p>19 On behalf of the Defendants</p> <p>20</p> <p>21</p>	<p>1 previously?</p> <p>2 A. The only thing I did was that I</p> <p>3 suggested to Mr. Sweeney -- I mean Mr. Queeney,</p> <p>4 I'm sorry, that I was curious to know about the</p> <p>5 history of the ownership of Owens-Corning by</p> <p>6 Owens-Illinois in the period between 1938 and</p> <p>7 1977, and I didn't have complete information on</p> <p>8 that, and so Mr. Queeney basically hired someone</p> <p>9 to look that up, and then Moody's Industrial</p> <p>10 Directory.</p> <p>11 Q. Do you know who he hired?</p> <p>12 A. Yes. He hired Stephen Berger, the</p> <p>13 author of Chapter 6 of my book.</p> <p>14 Q. Was that at your recommendation?</p> <p>15 A. Yes. I told him that Berger could do</p> <p>16 it if he needed somebody and he couldn't find</p> <p>17 anyone near hand, that he could hire Berger for</p> <p>18 that.</p> <p>19 Q. You and Mr. Berger have a long</p> <p>20 association?</p> <p>21 A. Yes.</p>
<p>1 PROCEEDINGS</p> <p>2 BARRY IRA CASTLEMAN, Sc.D.,</p> <p>3 being first duly sworn to tell the truth, the</p> <p>4 whole truth, and nothing but the truth, testified</p> <p>5 as follows:</p> <p>6 EXAMINATION BY MR. FISCHER:</p> <p>7 Q. Good morning, Dr. Castleman.</p> <p>8 A. Good morning.</p> <p>9 Q. My name is Matt Fischer. I represent</p> <p>10 Owens-Illinois in this case, and we are here for</p> <p>11 your deposition today.</p> <p>12 Did you review any materials specific</p> <p>13 to this case?</p> <p>14 A. No. I can't think of any documents I</p> <p>15 reviewed specific to this case.</p> <p>16 Q. Did you review any documents that you</p> <p>17 may have reviewed previously in preparation for</p> <p>18 your deposition?</p> <p>19 A. No.</p> <p>20 Q. Have you done anything in the course of</p> <p>21 your work in this case that you had not done</p>	<p>1 Q. Do you know how much Mr. Berger charged</p> <p>2 to do that work?</p> <p>3 A. No. I think it was under a thousand</p> <p>4 dollars.</p> <p>5 Q. Other than making that recommendation,</p> <p>6 were you involved in that research at all?</p> <p>7 A. No.</p> <p>8 Q. Were any results provided to you?</p> <p>9 A. Yes.</p> <p>10 Q. What were the results?</p> <p>11 A. Well, the results show that, as I</p> <p>12 recall, that Owens-Illinois continued to retain</p> <p>13 an ownership share in Owens-Corning of around 30</p> <p>14 percent until around 1970.</p> <p>15 Q. 1970?</p> <p>16 A. Right.</p> <p>17 Q. Prior to learning that in the course of</p> <p>18 your retention in this case, Dr. Castleman, did</p> <p>19 you know that to be true?</p> <p>20 A. No.</p> <p>21 Q. Did it come as a surprise to you?</p>

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1 A. No. I mean, they started out owning
2 half the company in 1938, and I knew that it went
3 down to 3 percent in 1977 because I had Moody's
4 Directory on that in my files. I just didn't
5 know how to connect the dots.

6 Q. Were any other facts provided to you
7 with respect to any ownership Owens-Illinois may
8 have had of Owens-Corning in that intervening
9 period?

10 A. Nothing beyond what I've told you.

11 Q. So your knowledge about the ownership,
12 as I understand it, is that OI owned
13 approximately half of Owens-Corning in 1938?

14 A. Right.

15 Q. 30 percent in 1970 and 3 percent in
16 1977?

17 A. Right.

18 Q. And you don't have any information
19 about any other time periods?

20 A. That's right. There may have been some
21 intervening time periods in the 1960s provided to

1 Q. When I asked you earlier, Doctor, if
2 you reviewed any documents in connection with
3 your retention, you said no.

4 A. Well, this was just a summary note. I
5 didn't actually look at the documentation on
6 which it was based, but I rely on Mr. Berger as
7 someone who can be relied upon for things like
8 that.

9 Q. Do you have whatever writing Mr. Berger
10 provided to you with you today?

11 A. No. It was a one-page summary with the
12 year and the percent ownership listed, abstracted
13 from Moody's Industrial Directory which I
14 understand you have been provided or at least you
15 had been provided by Plaintiff's counsel.

16 Q. You understand I have been provided
17 with what?

18 A. There are copies of the Moody's
19 Directories from which those figures were
20 extracted.

21 Q. Why do you understand that?

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1 me. I don't remember the details, but you're
2 basically talking about a monotone decreasing
3 functional relationship. You know, it goes down
4 with time. It doesn't go up and down.

5 Q. And you said based on those three
6 points of knowledge that you have?

7 A. Those and the others that were provided
8 to me.

9 Q. What were the others that were provided
10 to you?

11 A. I don't remember the numbers.

12 Q. Did Mr. Berger provide you with any
13 other information?

14 A. No.

15 Q. Did he provide the information directly
16 to you or did he provide it through Mr. Queeney?

17 A. He provided it I think to both of us at
18 once.

19 Q. Did he provide that information to you
20 orally?

21 A. No. It was provided in writing.

1 A. I thought Mr. Queeney told me that.
2 Maybe I misunderstood. It's no big thing.

3 Q. You believe the information Mr. Berger
4 gave you was reliable, right?

5 A. Yes.

6 Q. And in fact, you relied on it?

7 A. Yes.

8 Q. Other than this work that was done with
9 regard to any ownership that OI may have had of
10 Owens-Corning shares, did you do any other work
11 in this case that you hadn't done previously?

12 A. No.

13 Q. Did you take it upon yourself to review
14 any documents for this case even though you may
15 have looked at them for the first time for some
16 other case?

17 A. I don't think so.

18 Q. So as I understand it, you have no
19 information about Mr. Jacques' medical history;
20 is that right?

21 A. That's right. I may have been told. I

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1 just don't recall exactly what the details were.
 2 I know I have been told. I think that I was told
 3 that -- I get cases confused. I'm not sure. I
 4 think I may have been told that this was a lung
 5 cancer case. Hold it! Whoa! Now it's coming
 6 back to me. It is a relatively uncommon type of
 7 cancer, but it is a cancer that has been
 8 associated with asbestos by Dr. Kagan in his
 9 studies.

10 Q. How do you spell Kagan?

11 A. K-A-G-A-N.

12 Q. Would it be fair to say, Doctor, as you
 13 sit here today that you can't recall what disease
 14 Mr. Jacques allegedly has?

15 A. I don't recall the exact details, the
 16 pathology of the tumor, no.

17 Q. In fact, you don't know what organ the
 18 tumor arose in?

19 A. No.

20 Q. You also then have no information about
 21 Mr. Jacques' work history; is that right?

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1 A. I was told about it in the past, but I
 2 haven't reviewed it this morning, and I don't
 3 recall what it was, that's correct.

4 Q. Does Mr. Jacques' work history provide
 5 any basis for any of your opinions?

6 A. The opinions I would give would be
 7 based on the availability of information to
 8 Owens-Illinois at the time that Kaylo products
 9 were on the market.

10 Q. So that we are clear, your opinion
 11 would be your opinion no matter what Mr. Jacques'
 12 exposure history is; is that right?

13 A. Well, it is largely independent of
 14 Mr. Jacques' exposure history in the sense that
 15 he was exposed to Kaylo products. That I am
 16 assuming. And these products were marketed by
 17 Owens-Illinois in the manner that they were
 18 marketed.

19 Q. So that we are clear then, your opinion
 20 does not depend on any of the details of
 21 Mr. Jacques' exposure; is that right?

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1 A. Right.

2 Q. You say that you assumed that
 3 Mr. Jacques was exposed to Kaylo products.

4 A. Right.

5 Q. When you say that, do you mean to say
 6 that you assume he is exposed to Kaylo products
 7 manufactured by Owens-Illinois?

8 A. It may or may not have been
 9 manufactured by Owens-Illinois. I know that
 10 there is probably going to be some legal dispute
 11 about whether Owens-Illinois has any
 12 responsibility for Kaylo products sold and even
 13 manufactured by Owens-Corning in the years after
 14 1958.

15 Q. Why do you think there is going to be a
 16 legal dispute about that?

17 A. Because I understand that there will be
 18 a claim of concerted action in which
 19 Owens-Illinois may be held responsible for the
 20 acts of Owens-Corning.

21 Q. Who told you there would be a claim of

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1 concerted action?

2 A. Mr. Queeney.

3 Q. When did he tell you that?

4 A. This morning.

5 Q. Did he tell you that at any time prior
 6 to this morning?

7 A. We discussed the general concept
 8 earlier than that, but I don't get into the
 9 legalities. I don't really -- the fine points of
 10 law in the different states where these cases are
 11 filed are not something that I go to a great deal
 12 of trouble to acquaint myself with.

13 Q. Is it your testimony that prior to this
 14 morning, Mr. Queeney never told you that there
 15 was a concert of action claim in this case?

16 A. I understood whether you call it
 17 conspiracy or concert of action that there was
 18 something like that that Mr. Queeney was working
 19 on putting together in this case. I did
 20 understand that.

21 Q. Dr. Castleman, is it your testimony

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1 that prior to this morning, Mr. Queeney had never
2 told you that there was a conspiracy or concert
3 of action, or whatever synonym you would like to
4 use, claim in this case?

5 A. No, I am not saying that.

6 Q. Okay. When did he tell you that prior
7 to this morning?

8 A. I don't keep records. I mean, we've
9 had phone conversations from time to time about
10 this, and I understood that that was one thing he
11 was working on.

12 Q. Have you reviewed the complaint in this
13 case?

14 A. No.

15 Q. So you don't know if there is any
16 indication in the complaint about there being a
17 concert of action theory in this case?

18 A. That's right.

19 Q. Do you know if there has been any piece
20 of paper submitted, either to the parties or the
21 Court in this case, that suggests that there is a

1 A. No. I am not testifying about

2 causation. I am not giving medical testimony.

3 Q. You are not going to offer any opinion
4 that Mr. Jacques' disease was in fact caused by
5 asbestos, right?

6 A. Well, it would be medical testimony. I
7 don't do that.

8 Q. When were you first retained in this
9 matter by Mr. Queeney?

10 A. Sometime last year, but I don't
11 remember exactly when.

12 Q. And when you say last year, you mean
13 2001?

14 A. Yes.

15 Q. You don't mean to suggest that it was
16 more than a year ago, right?

17 A. No.

18 Q. Can you give me anything more specific
19 than 2001?

20 A. It's probably within the last four
21 months.

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1 concert of action theory being pursued by the
2 Plaintiffs?

3 A. I haven't seen any specific documents
4 submitted by either party in the case by the
5 lawyers for either side.

6 Q. Dr. Castleman, is it fair to say that
7 your opinions in this case are also independent
8 of whatever disease Mr. Jacques alleges -- excuse
9 me -- whatever disease Mr. Jacques' Estate
10 alleges that he contracted and died from?

11 A. Yes, in the sense that my testimony
12 relates to the conduct of the Defendant, not the
13 Plaintiff.

14 Q. You are not going to offer any
15 testimony about the specific disease that
16 Mr. Jacques' Estate alleges, right?

17 A. That's correct.

18 Q. And you are not going to offer any
19 testimony about medical literature in which there
20 might be a dispute about whether that disease is
21 in fact caused by asbestos?

1 Q. Sometime after August of 2001?

2 A. Yes.

3 Q. When you were retained, were you told
4 what you would be asked to testify about?

5 A. No.

6 Q. Was there any correspondence between
7 you and Mr. Queeney?

8 A. I don't think so.

9 Q. Did Mr. Queeney call you directly or
10 was he put in touch with you by someone else?

11 A. I don't recall him saying whether he
12 was referred to me by someone else or not.

13 Q. During that first conversation would
14 you have discussed, for example, what your
15 opinion would likely be?

16 A. No. I mean, at that time there were
17 several Defendants in the case in the beginning,
18 and there wasn't this focus on Owens-Illinois
19 that now exists. It was just the usual testimony
20 on state of the art that I testify about, the
21 history of knowledge about the hazards of

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1 asbestos, the availability of that knowledge to
 2 the individual Defendants in the case.
 3 Q. Do you recall who the Defendants were
 4 at the time you were first retained?
 5 A. I remember Flintkote was another one,
 6 and there may have been others at the time in the
 7 beginning part of the case.
 8 Q. Do you believe that there were others
 9 at that time?
 10 A. There may have been. I don't know. I
 11 don't recall any others, but there may have
 12 been.
 13 Q. So essentially Mr. Queeney contacted
 14 you and said Dr. Castleman, we'd like you to be
 15 our expert in this case for state of the art; is
 16 that right?
 17 A. Right.
 18 Q. And asked for essentially the usual
 19 testimony?
 20 A. Right.
 21 Q. He didn't ask for anything in

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1 particular to be added or left out?
 2 A. No.
 3 Q. You mentioned that you've had several
 4 conversations with Mr. Queeney; is that right?
 5 A. Right.
 6 Q. Have you also spoken to other people
 7 from his office?
 8 A. Yes. He has an assistant named Eric
 9 who generally contacts me for more secretarial
 10 types of things.
 11 Q. Would it be fair to say that you have
 12 never had any discussion with Eric that was not
 13 administrative?
 14 A. That's correct.
 15 Q. Is there anyone else in Mr. Queeney's
 16 office that you have spoken to?
 17 A. Not that I can recall. I mean, there
 18 may have been other people who contacted me about
 19 scheduling and things like that.
 20 Q. Would it be fair to say that
 21 Mr. Queeney is the only person from his office

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1 with whom you have discussed the sum and
 2 substance of your expected testimony?
 3 A. Correct.
 4 Q. Tell me how many conversations you've
 5 had with Mr. Queeney over the past four months.
 6 A. I don't know. Maybe five or ten,
 7 something in there.
 8 Q. Does that strike you as a large number
 9 of conversations you to have with Plaintiff's
 10 counsel in an asbestos case?
 11 A. No. It's just that some lawyers are
 12 more diligent about learning the stuff and
 13 putting it together than others. A lot of
 14 lawyers just list me in their cases and never get
 15 in touch with me after they make the initial
 16 contact. That might mean that their cases aren't
 17 coming up for trial for a long time. It might
 18 mean a lot of things.
 19 Q. Would it be fair to say that these five
 20 or ten conversations were at least partially you
 21 educating Mr. Queeney about the background and

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1 substance of your opinions?
 2 A. Well, that's always the case when an
 3 attorney gets into this litigation and contacts
 4 me and hires me as an expert, to deal with my
 5 particular part of the case, that I know that
 6 area better than the lawyer does, at first at
 7 least.
 8 Q. Do you know where this case is pending,
 9 Doctor?
 10 A. Where?
 11 Q. Yes.
 12 A. I think it's in Chicago, but I am not
 13 sure.
 14 Q. Do you know whether it is pending in
 15 Federal or State Court?
 16 A. I think I was told it was Federal
 17 Court.
 18 Q. When was the last time you testified in
 19 a trial in Federal Court?
 20 A. I don't remember.
 21 Q. Has it been more than ten years?

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A. I don't think so. And I was involved in a case in Federal Court, the Chase Manhattan case against Turner & Newell, but I didn't testify in the trial. I testified -- I was deposed on three occasions, but I didn't testify in the trial. It seems to me I have been in the Federal Court sometime since then, but I don't recall when.

Q. The Chase Manhattan case was tried in the early '90s; is that right?

A. 1995.

Q. '95. And that was a property damage case, right?

A. Yes.

Q. Chase Manhattan sued Turner & Newell for property damage arising out of the use of sprayed asbestos-containing insulation in their building in Manhattan, right?

A. Right.

Q. Just so we are clear, Doctor, other than that, you can't think of any other case in

1 Q. Do you remember whether it was right at
2 the beginning or sometime after you were first
3 retained?

4 A. I don't remember now.

5 Q. You mentioned Mr. Queeney asked you to
6 write a report; is that right?

7 A. I think so, yes.

8 Q. Did you in fact prepare a report in
9 this case?

10 A. I think we were working on a report,
11 but I think this was also around the time I was
12 running off to Argentina for a meeting in the
13 beginning of October. I don't recall how that
14 got completed.

15 Q. What it be fair to say, Doctor, that
16 you don't recall whether or not you have issued a
17 report in this case?

18 A. That's correct.

19 Q. You understand that for an expert
20 witness, the federal rules require that a report
21 be prepared?

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Federal Court that you have been involved in for the past ten years; is that fair?

A. None come to mind. I think there have been some, but I just don't recall.

Q. And in terms of testifying at trial in Federal Court, there are no instances that come to mind over the past ten years; is that right?

A. Right. Almost all these cases have been in State Court in the past ten years.

Q. During these five to ten conversations that you had with Mr. Queeney, at any time did he suggest to you a particular direction that he would like your opinion to go?

A. No more than any lawyer does. I mean, they are just trying to figure out what does the evidence show, and he was also asking me to, I think, write a report at some point.

Q. Did Mr. Queeney first suggest to you, if you can remember, that there was a concert of action element of this case?

A. I don't remember.

1 A. I don't really know what the federal
2 rules are.

3 Q. During the course of your work as a
4 witness in the asbestos litigation, have you
5 prepared reports for other cases?

6 A. On occasion. Usually not, but on
7 occasion I have, yes.

8 Q. It would be fair to say that it's the
9 small minority of cases in which you are asked to
10 prepare a report?

11 A. Right.

12 MR. FISCHER: Could you mark that as 1,
13 please.

14 (Whereupon, Castleman Deposition
15 Exhibit No. 1, Report of Barry I. Castleman,
16 marked.)

17 BY MR. FISCHER:

18 Q. Dr. Castleman, I would ask you to take
19 a look at what we have got marked as Exhibit 1.

20 A. Yes.

21 Q. And let me know when you have had a

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1 chance to look it over.

2 A. Okay. This looks like the report we
3 were putting together for the case.

4 Q. That document, Doctor, has a Bates
5 stamp on the bottom of it, right?

6 A. If you mean the numbers on the
7 pages, --

8 Q. Yes.

9 A. -- yes, it does.

10 Q. It runs from J 00292 to J 00302?

11 A. Yes.

12 Q. It is an 11-page document, right?

13 A. Right.

14 Q. On the last page it appears that
15 there's a signature line with your name under it,
16 right?

17 A. Right.

18 Q. But the report is not signed?

19 A. Right.

20 Q. Do you know, did you ever sign a copy
21 of this report?

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1 A. I don't remember whether I did or not.
2 There was a lot of confusion at the time that we
3 were trying to conclude this thing, and I had
4 gone over the thing, and I had approved of what
5 it contained, and that was basically the point of
6 looking through it, for typographic errors, I
7 think, and I didn't hear from Mr. Queeney anymore
8 about that, so I see apparently this was never
9 formally signed when it was submitted or whether
10 it has been submitted. I don't know what the
11 status of this thing is.

12 Q. So it is your testimony that you did
13 not ever sign a copy of this report?

14 A. I don't remember signing a copy of the
15 report. I may have, but I don't remember. We
16 were in the final stages of putting it in, and I
17 don't recall what was going on at the time.

18 Q. You mentioned that you were in
19 Argentina in October; is that right?

20 A. Right. I must have been doing
21 something else in November at the time that this

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1 was going on.

2 Q. That's what I wanted to get clear on
3 that point. Doctor, do I understand you to say
4 that you were working on this particular report
5 in October and it was delayed for whatever reason
6 or is it your testimony that you just had the
7 dates perhaps confused with regard to this
8 particular report?

9 A. I really don't remember the dates when
10 all this went on.

11 Q. Was there anything -- do you know where
12 you were on November 20th of 2001?

13 A. No.

14 Q. Do you know if you were in the
15 country?

16 A. Yes, I was in the country.

17 Q. Did Mr. Queeney ever notify you that he
18 was delivering a copy of that report to me?

19 A. I understood that he was going to do
20 that, but I don't recall him specifically telling
21 me that.

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1 Q. Did he ever tell you that he was going
2 to send a copy to me even though it hadn't been
3 signed by you?

4 A. Again, I don't remember the details.
5 He may have told me that. It wouldn't have
6 mattered that much to me as long as it was -- you
7 know, I had basically approved of the content of
8 the report, and as far as I was concerned, he
9 could do what he wanted with it, and I would have
10 been happy to sign it, too.

11 Q. Where was this document prepared? By
12 "this document" I am referring to Exhibit Number
13 1.

14 A. Well, I provided him with a similar
15 type of report that had been filed in another
16 case and marked up a few changes and wound up
17 with this.

18 Q. So Exhibit Number 1, if I understand
19 your testimony, was prepared in Mr. Queeney's
20 office, right?

21 A. Right.

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1 MR. QUEENEY: Objection. That's not
2 his testimony.

3 A. It was prepared by, it was typed up by
4 Mr. Queeney's office.

5 Q. And it was typed up based on a report
6 from an earlier case that you sent to him?

7 A. Right.

8 Q. Do you have a copy of that report, the
9 one that you sent to Mr. Queeney?

10 A. Probably. I have it in my file
11 cabinet.

12 Q. Would it be possible for me to get a
13 copy of that?

14 A. I suppose so.

15 MR. FISCHER: Bob, just so we are on
16 the record official, I would like to have a copy
17 of the report that Mr. Castleman sent to you that
18 was the basis of this report.

19 MR. QUEENEY: Sure.

20 Q. Dr. Castleman, did you when you sent
21 the report to Mr. Queeney -- let me strike that

1 A. I don't remember dates. It looks like
2 it's pretty well, pretty much the same thing. I
3 am looking for anything that might have changed.
4 I haven't seen anything that I am struck by here
5 that I recall having been changed from the thing
6 that I had originally sent to Mr. Queeney.

7 Q. Doctor, I see you have now had a chance
8 to page through all of Exhibit Number 1. Are you
9 satisfied that the exhibit accurately reflects
10 your opinions?

11 A. Yes.

12 Q. And are you satisfied that Mr. Queeney
13 didn't do any violence to your contents with
14 whatever editing he might have done?

15 A. I am satisfied that he didn't do any,
16 didn't do anything that would cause me any
17 problems.

18 Q. Is that typically your practice,
19 Doctor, to allow the attorneys who retain you to
20 edit your reports?

21 A. You are misstating what I said. If the

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1 and start over again.

2 Dr. Castleman, when you sent the first
3 report to Mr. Queeney, did you mark anything on
4 that first report and send it to him?

5 A. I don't remember.

6 Q. So you don't remember whether you sent
7 him that report as it was written or with
8 markups, right?

9 A. I probably just sent it as it was
10 written, said look, this is a rough draft, you
11 can work from it and put together something maybe
12 more particular for your case.

13 Q. Do you know what Mr. Queeney added or
14 removed?

15 A. No. I mean, I don't remember now.
16 It's basically the same thing.

17 Q. Do you know if you ever reviewed it
18 after Mr. Queeney edited it before it was
19 submitted to me?

20 A. Yes, I did.

21 Q. Did you do that?

1 attorney wants to make a change, I mean lots of
2 times when I'll send these things around or get
3 them back and reread them, I will see a typo or
4 something like that that needs to be cleaned up,
5 and if the attorney wants to change something, I
6 certainly want him to show me what he wants to
7 change, and I will look at the way it is
8 expressed, and if I am not comfortable with it,
9 we will change it some more, but I am not going
10 to agree to anything as being my report unless I
11 am comfortable with what it says.

12 Q. I guess I am trying to understand what
13 your disagreement is with my question, Doctor.

14 Do you disagree with me that
15 Mr. Queeney edited your report?

16 A. Well, I think we ought to define what
17 we mean by edited. If the attorney chooses to
18 make any changes or wishes to make any changes to
19 a draft that I sent him for reasons that might
20 have to do with the particular language of the
21 law in the state where the attorney practices or

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1 something else that might be particular with the
2 case, I don't have any problem with that
3 basically. I just want to be shown whatever
4 changes were intended to be made and satisfy
5 myself that I am comfortable with those
6 statements as my statements, and if I don't feel
7 comfortable, then I won't adopt them as my
8 statements and will have further statements about
9 what does or doesn't go into the report.

10 Q. And, Doctor, why don't we define
11 editing, and let me make this very clear. When I
12 ask you if Mr. Queeney edited your report, I do
13 not mean to suggest that anything was done
14 without your consent or that it was somehow done
15 secretly. What I am asking you is did
16 Mr. Queeney do what an editor might do, suggest
17 changes or deletions and then discuss with the
18 author what those changes and deletions may be?

19 A. I think that he was thinking of doing
20 something like that, but I don't have any clear
21 memory of what exactly he might have changed in

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1 here. I don't see anything in here that I recall
2 having been changed subsequent to my discussions
3 with Mr. Queeney.

4 Q. But we don't have with us today the
5 document that you sent to Mr. Queeney, correct?

6 A. No, but I think it would have been
7 pretty much the same. It's the same text. I
8 don't see anything or remember anything that got
9 changed in between the two.

10 Q. Were there any other documents,
11 Dr. Castleman, that you sent to Mr. Queeney other
12 than the report that served as the basis of
13 Exhibit 1?

14 A. I provided Mr. Queeney with the
15 corporate files that I have of Owens-Illinois and
16 possibly others. It might have been -- I don't
17 remember if I provided him with a Flintkote file
18 or not. I'm not sure. I didn't have much of a
19 Flintkote file at the time, and I don't recall if
20 it was available, but I have somebody who comes
21 over and scans some of my corporate files. He

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1 has been doing this for the past few months, and
2 that makes these documents available to people in
3 ways they weren't available before, and so this
4 has been done with respect to my Owens-Illinois
5 files, file which was provided to Mr. Queeney.
6 It's basically the same material that's discussed
7 in Chapter 9 in my book regarding Owens-Illinois.

8 Q. Was there anything provided to
9 Mr. Queeney that is not discussed in Chapter 9 of
10 your book?

11 A. There might have been something in that
12 Owens-Illinois file that's not specifically
13 discussed, but it wouldn't be anything
14 significant. It's basically the Owens-Illinois
15 library, the Kaylo testing documents.

16 Q. When you say "the Kaylo testing
17 documents", Doctor, are you talking about the
18 Saranac documents?

19 A. Right.

20 Q. When you say "the Owens-Illinois
21 library", are you talking about a list of

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1 periodicals that were likely at Owens-Illinois
2 during the time it was manufacturing Kaylo?

3 A. Yes. The list and the documents
4 themselves.

5 Q. You would have provided both the list
6 and the documents to Mr. Queeney?

7 A. Yes.

8 Q. Other than those two categories,
9 Doctor, is there anything else that you provided
10 to Mr. Queeney in relation to Owens-Illinois that
11 is not discussed in Chapter 9 of your book?

12 A. Nothing I can recall.

13 Q. Would it be fair to say, Doctor, that
14 both of those two categories are materials that
15 you possessed prior to the publication of the
16 Fourth Edition?

17 A. I think so because I think I do talk
18 about the Owens-Illinois library in the Fourth
19 Edition. I think that that information came to
20 me within a year or two of the publication of the
21 Fourth Edition. The concluding discussion on

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1 page 600 about Owens-Illinois talks about the
2 library material.

3 Q. So you clearly had that material prior
4 to the publication of the Fourth Edition?

5 A. Right.

6 Q. And you also had the Saranac materials
7 prior to the Fourth Edition, right?

8 A. Right.

9 Q. So then do we agree that in the
10 materials that you provided to Mr. Queeney, there
11 was nothing that you have obtained after the
12 publication of the Fourth Edition of your book,
13 Asbestos: Medical and Legal Aspects?

14 A. I think that's correct. I mean, I
15 don't know that for absolute certainty, but I
16 think that's true.

17 Q. Other than, Doctor, the first report
18 that you sent to Mr. Queeney as well as your file
19 on Owens-Illinois, is there any other material
20 that you provided to Mr. Queeney during the
21 course of your retention in this matter?

1 Q. You never saw their library?

2 A. No. I have only seen answers to
3 interrogatories from Owens-Illinois regarding the
4 contents of the library.

5 Q. As a matter of fact, you have never
6 been present at any Owens-Illinois facility,
7 correct?

8 A. That's right.

9 Q. You have never talked to any
10 Owens-Illinois employee?

11 A. Not that I can recall.

12 Q. Dr. Castleman, when were you born?

13 A. 1946. Of course, that's based on
14 hearsay.

15 Q. Naturally.

16 MR. QUEENEY: That was a good year.

17 Q. Is it fair to say, Doctor, that all of
18 the knowledge you have gained about the history
19 of use of asbestos in this country comes from
20 material you have read?

21 A. From the history of use of asbestos in

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1 A. Nothing that I can recall.

2 Q. Did you provide Mr. Queeney with your
3 file on Owens-Corning, for example?

4 A. No.

5 Q. Can you tell me, Doctor, what the
6 volume of your file on Owens-Illinois consists
7 of?

8 A. Well, you mean how big is it?

9 Q. Yes.

10 A. I think it's about 3 inches thick, not
11 counting the library materials --

12 Q. And --

13 A. -- which are larger and more
14 voluminous.

15 Q. By "library materials", you are again
16 referring to the actual materials that you
17 believe were possessed by Owens-Illinois?

18 A. Right.

19 Q. You never visited Owens-Illinois,
20 right?

21 A. No.

1 this country?

2 Q. Right.

3 A. If by history you are talking about
4 prior to 1970 before I became a participant in
5 the arena of regulation and public health, that
6 would be true. I was not -- you know, I guess
7 you could say I have also learned about some of
8 this by interviews with old-timers in the field
9 of occupational medicine, but aside from those
10 kinds of oral histories, the rest of it is
11 contained in documentation. It's in corporate
12 documents. It's in library articles and things,
13 books, Government records, archives of scientists
14 and the Government, so on.

15 Q. Would it be fair to say that for the
16 period prior to 1970 you don't have any personal
17 knowledge of how asbestos was used in the United
18 States?

19 A. I wasn't really paying attention to
20 it. I mean, I was working in the chemical
21 industry myself with the stuff all around me and

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1 not even thinking about it.

2 Q. Would it be fair to say that prior to
3 1970 you were not a participant in the public
4 health arena, as you say?

5 A. That's correct.

6 Q. You gave me a rundown of some of the
7 documents that you have looked at since 1970 a
8 few minutes ago, right?

9 A. Yes.

10 Q. You have also relied on sworn testimony
11 that has been offered in a variety of litigation
12 circumstances, right?

13 A. Yes. On occasion.

14 Q. Have you made an effort to make a
15 complete review of the sworn testimony that has
16 been given in asbestos-related cases?

17 A. No, no. That would be impossible, and
18 I have tried to find things that were most
19 important in terms of laying out the history of
20 who knew what, when, but, as you know, there are
21 depositions taken every day or at least every

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1 week of people about that subject.

2 Q. In terms of reviewing testimony of
3 people with personal knowledge of what was
4 occurring, Doctor, in the 1940s and 1950s and
5 1960s with regard to asbestos-containing
6 products, have you made an attempt to
7 comprehensively review that testimony?

8 A. I can't add anything to what I just
9 told you. I mean, I try to find things that I
10 think were, things that came to my attention,
11 things that might have been significant in the
12 history of knowledge about asbestos and disease.

13 Q. You mentioned that you have tried to
14 read things that have come to your attention.
15 Have you done anything to go out and try to
16 acquire source material that may have not come to
17 your attention in the ordinary course?

18 A. I guess I've done that on a lot of
19 things that went into putting this book
20 together.

21 Q. Have you made any attempt to review

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1 sworn testimony by employees of Owens-Illinois in
2 the Kaylo division?

3 A. I have seen a transcript of testimony
4 of Willis Hazard. I can't recall anything other
5 than that.

6 Q. Have you ever made an attempt to
7 determine whether or not anything else exists?

8 MR. QUEENEY: Can you narrow that down
9 a little bit?

10 A. Yeah. What do you mean by that?

11 Q. Have you made any attempt to determine
12 whether or not there is any other sworn testimony
13 that has been given by former employees of
14 Owens-Illinois' Kaylo division?

15 A. I imagine there have been other
16 depositions given by other people who were in
17 some way involved, but I don't know about any of
18 them. I mean, I guess the stuff, if it was
19 significant, it would have come to my attention
20 and hasn't. The Hazard depositions seemed
21 significant at the time that they were taken and

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1 at the time that they were passed on to me.

2 Q. Who passed those on to you?

3 A. I don't remember anymore. I think the
4 deposition was 20 years ago.

5 Q. And you probably obtained that shortly
6 after it was given?

7 A. Probably within a couple of years after
8 it was recorded.

9 Q. And I understand that you have not done
10 anything to try to obtain sworn testimony by any
11 other former employee of the Owens-Illinois Kaylo
12 division, right?

13 A. I don't think so, no. At least I can't
14 remember now any other names.

15 Q. Doctor, the knowledge you have and the
16 opinions that you have expressed in what we have
17 as Exhibit 1 are based on your review of
18 historical documents and sworn testimony and
19 Government records and some of the other
20 documents that you listed for us previously,
21 right?

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1 A. Right.

2 Q. Your opinions are not based in any way
3 on any experiments that you have ever done,
4 right?

5 A. No. We are talking about history. We
6 are not talking about laboratory analysis. We
7 are talking about the history of public health.

8 Q. And you have never done any formal
9 study of the use of asbestos by Owens-Illinois,
0 right?

1 MR. QUEENEY: Objection to the form of
2 the question. What do you mean by that, "formal
3 study"? Other than his reading all the stuff?

4 Q. You can answer the question, if you
5 can, Doctor.

6 A. Well, I don't really know what you mean
7 by the term "formal study" either. I certainly
8 know nobody at Owens-Illinois ever hired me to
9 study the way they used asbestos. What do you
0 mean by formal study?

1 Q. You never did anything to try to

1 MR. QUEENEY: As to what, Matt?

2 Perspective as to? It is two decades of
3 perspective undefined.

4 Q. You can answer, if you can, Doctor.

5 A. Well, if I narrow what you mean by
6 perspective to the health hazards associated with
7 manufacturing and using Kaylo, I haven't seen
8 anything that you could call evidence that adds
9 to the documentary basis that I have referred to
10 in my book. I haven't heard of it. I haven't
11 been cross-examined about it. I haven't been
12 otherwise informed that any such significant
13 evidence exists in the form of trial or
14 deposition testimony by such people as former
15 Owens-Illinois employees who might have had some
16 familiarity with the Kaylo operations.

17 Q. And it's fair to say, Doctor, that you
18 haven't looked for that material either, right?

19 A. That material has its way of finding
20 me. I testify in trials in which Owens-Illinois
21 is a Defendant. I would think that if there was

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1 determine what the Owens-Illinois employees were
2 thinking at the time they manufactured Kaylo,
3 right?

4 A. Aside from the documents that have
5 survived, I haven't known of any such employees
6 who might be prevailed upon to talk about what
7 they were thinking back then in the 1950s when
8 Owens-Illinois was making Kaylo back in the '50s
9 and the 1940s.

0 Q. And you haven't done anything to try to
1 determine what Owens-Illinois' perspective would
2 have been, right?

3 A. Well, Owens-Illinois' perspective I
4 think is, I think it is evident from the
5 documentation that I have referred to in my
6 book.

7 Q. Other than reviewing and interpreting
8 the historical documents, Doctor, you haven't
9 done anything to try to find out what
0 Owens-Illinois' perspective was in the 1940s and
1 '50s, right?

1 testimony by somebody who had been with
2 Owens-Illinois and who had been in the position
3 to know something about the health hazards
4 associated with the product and its manufacture
5 and if that individual had had anything
6 significant to say and if that information would
7 have in any way conceivably inured to the benefit
8 of Owens-Illinois and the defense of these cases,
9 it would have been brought to my attention, and I
10 get cross-examined by very capable attorneys like
11 yourself who represent Owens-Illinois from time
12 to time, and this is the kind of thing that if
13 there was some significant evidence in the form
14 of testimony by anybody that I hadn't known
15 about, I would expect to hear about it.

16 Plaintiff's lawyers also talk to me
17 about witnesses and evidence and testimony and so
18 on that they are expecting as trials are coming
19 up, and they say well, do you know anything about
20 so-and-so, and if it's some plant official or
21 something like that from one of the Defendants

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1 that I don't know about, then we will have a
2 conversation about what is it that this person
3 has to say, and I just can't think of anything of
4 that kind in connection with Owens-Illinois and
5 the manufacture of Kaylo aside from the testimony
6 of Mr. Hazard.

7 Q. And, Doctor, I understand your answer.

8 My question, however, is whether or not you have
9 done anything independently to go out and search
10 out information that would add to your body of
11 knowledge about Owens-Illinois' perspective when
12 it manufactured and sold Kaylo in the 1940s and
13 '50s?

14 A. No.

15 Q. It's fair to say that you believe that
16 that material would find its way to you if it was
17 out there, right?

18 A. Right. If there was anything
19 significant.

20 Q. Your methodology is to allow people to
21 bring you the material as opposed to going out

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1 and searching for it yourself?

2 A. I have done both in the past, but for
3 the type of thing you are asking about, it's not
4 something one finds in medical and engineering
5 libraries. It's only available through the
6 channels of litigation, and there are a lot of
7 Defendant companies in the asbestos litigation.
8 I haven't systematically tried to call up
9 whatever law firms I know who might have more
10 complete files on some or others and ask them the
11 specific things that you are asking me about
12 right now, do you have any testimony from some
13 employee, some plant manager, some other
14 management official or worker at this plant who
15 has anything to say about what they knew about
16 the hazards of asbestos, what they thought about
17 the hazards of the product back in the 1950s or
18 whatever. I haven't gone to the extent of
19 basically calling up a bunch of lawyers to try
20 and find out if evidence of this kind exists
21 which over the past 23 years of my involvement in

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1 this litigation hasn't found its way to me in the
2 form of something I get delivered to me in one or
3 the other of the ways that I have just described.

4 MR. QUEENEY: At some time when you are
5 at a certain point, I'd like to take a short
6 break.

7 MR. FISCHER: Sure. That's fine. This
8 is a good point.

9 (Recess taken -- 11:21 a.m.)

10 (After recess -- 11:25 a.m.)

11 BY MR. FISCHER:

12 Q. Doctor, this deposition was originally
13 scheduled for December 20th, right?

14 A. I think so. I don't remember. There
15 are so many depositions that get scheduled and
16 rescheduled.

17 Q. Well, this one may be a little
18 different. I understand it was rescheduled at
19 your request. Do you recall making that
20 request?

21 A. Yes. Vaguely.

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1 Q. December 20th was two weeks ago today.
2 Do you recall where you were?

3 A. I don't.

4 Q. When was the last time you testified at
5 a trial?

6 A. I was out on the West Coast right
7 around that time, so that's probably why this was
8 rescheduled. Yes. I was testifying in San
9 Francisco that week.

10 Q. Do you recall which days that week you
11 testified?

12 A. No.

13 Q. Who was the Plaintiff's counsel there?

14 A. It was the firm of Paul & Hanley.

15 Q. Do you remember the lawyer who
16 questioned you on direct examination?

17 MR. QUEENEY: Sweeney.

18 A. No. What happened was I came out there
19 for a deposition and a trial, and we only wound
20 up doing the deposition. I think that was on
21 Tuesday, and then there was another deposition

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1 that was offered on Wednesday, and there were no
 2 takers. There was also some talk about having a
 3 Tuesday deposition that might carry into
 4 Wednesday, and then there was supposed to be a
 5 trial on Thursday, and at some point that trial
 6 got moved to Federal Court after I was out there,
 7 so that's why I was unable to be available that
 8 Thursday for your deposition in this case.

9 Q. Is it fair to say then you don't --
 10 well, I'm sorry. There was no trial testimony.
 11 The deposition, was it in the same case that was
 12 scheduled to be heard for trial?

13 A. I don't think so. No.

14 Q. Who questioned you at the deposition,
 15 if you know?

16 A. The lawyer questioning me represented a
 17 company called Kaiser Gypsum.

18 Q. Do you recall his name?

19 A. No.

20 Q. Was there a Plaintiff's lawyer there at
 21 the deposition with you?

1 Q. What opinions did you offer in that
 2 case where you were deposed?

3 A. Oh, I basically offered the opinion
 4 that in the case in which I was testifying where
 5 exposure from the products didn't start until
 6 sometime after 1965, I testified that the company
 7 was clearly aware of the fact that asbestos
 8 caused cancer in 1965, and within a short time
 9 after that, they were aware of the hazards
 10 associated with drywall patching compounds they
 11 were selling in the form of specific product
 12 testing that was done and correspondence that
 13 existed regarding whether they were covered by
 14 the OSHA asbestos standards requirements for
 15 warning labels.

16 Q. Do you know the name of the case?

17 A. I don't remember.

18 Q. Did you write a report for that case?

19 A. No.

20 Q. As I understand it, Doctor, your
 21 opinions in that case were specific to Kaiser

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1 A. Yes.

2 Q. Do you know that person's name?

3 A. I have forgotten her name. She was one
 4 of the lawyers that I hadn't worked with in the
 5 past in the firm, and she was just sort of
 6 filling in to be present at the deposition. She
 7 didn't really have to do anything.

8 Q. You pretty much have done this enough
 9 that you can deal without help from a lawyer,
 10 right?

11 A. Well, there is no -- yeah. At this
 12 stage of my familiarity with the legal arena,
 13 there's little for Plaintiff's attorneys to do
 14 usually at discovery depositions. Every once in
 15 a while questions are asked that aren't clear or
 16 might not be proper, but that's not usually a
 17 problem, and if the questions aren't that clear,
 18 I can usually deal with it just as well by either
 19 clarifying what I think the question was before
 20 answering it or by just asking the lawyer to ask
 21 it again.

1 Gypsum?

2 A. Right.

3 Q. Were you being asked to be a general
 4 state of the art witness in that case?

5 A. Well, part of testifying in most of
 6 these cases is to provide general state of the
 7 art testimony on what was publicly available.

8 Q. I'd like you to again look at Exhibit 1
 9 to the deposition here. Would you agree with me,
 10 Doctor, that that report doesn't say anything
 11 about Owens-Illinois?

12 A. I think that's right. I don't think
 13 Owens-Illinois specifically was mentioned or
 14 named in the report.

15 Q. And it doesn't say anything about
 16 Owens-Corning, right?

17 A. I think that's also true.

18 Q. It doesn't say anything about concerted
 19 action, right?

20 A. I don't believe so. Although there was
 21 a one-page addition to the report which you have

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1 been provided within the last day or two.
 2 Q. We are going to get to that, but I just
 3 want to focus on Exhibit 1 for the time being.
 4 Exhibit 1 also doesn't say anything about
 5 substantial assistance, right?
 6 A. I guess that's a legal expression. I
 7 don't believe it does, that's right.
 8 Q. We can agree that it doesn't contain
 9 the words substantially assisted, right?
 10 A. Right.
 11 Q. And it doesn't contain the words
 12 substantial assistance, right?
 13 A. My report initially does not, right.
 14 This November report does not say that.
 15 Q. And that report doesn't say anything
 16 about either Owens-Illinois or Owens-Corning
 17 misrepresenting health hazards related to Kaylo,
 18 right?
 19 A. That's right. I mean, this report
 20 wasn't drafted for any particular Defendant.
 21 It's a more general report.

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1 Q. As a matter of fact, the report that we
 2 have marked as Exhibit 1 is just the general
 3 state of the art testimony, right, --
 4 A. Yes.
 5 Q. -- that you have given many times?
 6 A. Oh, it summarizes the testimony that I
 7 have given many times, yes.
 8 Q. The report that we have marked
 9 Exhibit 1 doesn't say anything about whether
 10 Owens-Illinois or Owens-Corning warned or
 11 disclosed of any hazards related to asbestos,
 12 right?
 13 A. No, but it makes frequent reference to
 14 my book which contains much more detailed
 15 information along those lines.
 16 Q. I am right, though, Doctor, that the
 17 report doesn't contain any reference to
 18 Owens-Illinois or Owens-Corning in relation to
 19 any warnings relating to asbestos hazards,
 20 right?
 21 A. I believe that's right.

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1 Q. I'm sorry. I didn't hear you.
 2 A. I believe that's right I said.
 3 Q. You mentioned that there was a one-page
 4 supplement, right?
 5 A. Right.
 6 Q. Did you sign that document?
 7 A. Yes.
 8 Q. When did you sign it?
 9 A. Yesterday.
 10 Q. What time?
 11 A. Early afternoon I think I got to it.
 12 MR. FISCHER: Would you mark that as
 13 Exhibit 2, please.
 14 (Whereupon, Castleman Deposition
 15 Exhibit No. 2, Fax Transmittal to Fischer from
 16 Queeney with 1/2/02 Addendum, marked.)
 17 BY MR. FISCHER:
 18 Q. Doctor, would you take a look at what
 19 we have marked as Exhibit 2 and describe that for
 20 me.
 21 A. This is the addendum to my report which

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1 I signed and faxed to Mr. Sweeney --
 2 Mr. Queeney. Sorry.
 3 Q. You signed and faxed this to
 4 Mr. Queeney yesterday, right?
 5 A. Yes.
 6 Q. I'm going to just read this in its
 7 entirety, and you can tell me if I read it
 8 correctly.
 9 "Dear Mr. Queeney, to clarify my prior
 10 report, I am of the opinion that Owens-Illinois
 11 acted in concert with Owens-Corning Fiberglas in
 12 that Owens-Illinois and Owens-Corning Fiberglas
 13 each misrepresented the health hazards of Kaylo
 14 and failed to disclose or warn that Kaylo
 15 insulation products could cause asbestosis and
 16 cancer; Owens-Illinois substantially assisted and
 17 encouraged such conduct by Owens-Corning
 18 Fiberglas; and Owens-Illinois provided
 19 substantial assistance to Owens-Corning Fiberglas
 20 in its marketing and sale of Kaylo products while
 21 Owens-Corning Fiberglas and Owens-Illinois were

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1 each failing to disclose these same hazards.

2 Sincerely Barry I. Castleman."

3 Is that right?

4 A. Right.

5 Q. I want to ask you, Doctor, how this
6 came about.

7 Is it fair to say that when you woke up
8 yesterday morning, you weren't thinking that you
9 needed to submit an addendum, as you called it,
10 to your earlier report?

11 A. That's right. I may have been told
12 something about this, but I don't think I was.

13 Q. So what happened yesterday that led you
14 to write this paragraph and send it to
15 Mr. Queeney?

16 A. This was transmitted to me along with
17 the question is this agreeable to you to sign a
18 statement like this, and I looked it over, and I
19 said yes, it is, and I signed it, printed it on
20 my letterhead -- I mean printed it on my
21 letterhead, signed it and then faxed it back to

1 the state that he is practicing in, and I just
2 looked at the statement itself and said okay, I
3 can sign that, I agree that those things are
4 true.

5 Q. It's fair to say that after Mr. Queeney
6 sent this paragraph to you, you didn't do any
7 additional investigation, right?

8 A. No. That's correct, I did not do any
9 additional investigation.

10 Q. You didn't do any additional research?

11 A. Correct.

12 Q. You simply looked over that paragraph,
13 put it on your letterhead and signed it?

14 A. Right.

15 Q. Do you know who wrote the paragraph
16 originally?

17 A. I assume Mr. Queeney or one of his
18 assistants did. I assume Mr. Queeney did that.

19 Q. Does it matter to you who wrote it
20 originally?

21 A. It came from his office. I assume that

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1 Mr. Queeney.

2 Q. You spoke to Mr. Queeney yesterday?

3 A. Yes.

4 Q. Did you speak to him before you signed
5 this piece of paper?

6 A. I don't think so.

7 Q. So he sent you an e-mail presumably, or
8 how did that work?

9 A. It was an attachment to an e-mail. I
10 cleaned up the misspellings, printed it.

11 Q. And when I asked you, Doctor, if you
12 had reviewed any materials in connection with
13 your retention in this case, you didn't consider
14 that to be the kind of material I was asking
15 about?

16 A. Maybe I just didn't think of it. I
17 mean, this whole affair didn't take a great deal
18 of time. I mean, I looked at the document. I
19 thought okay, this lawyer needs something that
20 relates to the specifics of the claims he is
21 making in the court that he's in and the laws in

1 this wasn't just something that some secretary
2 did on her lunch hour.

3 Q. Assuming that it was an authorized
4 transmission, does it matter to you at all who
5 wrote the paragraph in the first instance?

6 A. I assume that Mr. Queeney wrote this.
7 The language seemed to me to be rather carefully
8 chosen. It wasn't a lengthy statement. It was
9 just a short-and-to-the-point kind of statement,
10 and it was about things that we had talked about
11 in the past, this whole business of the

12 interaction of Owens-Corning and Owens-Illinois.

13 Q. Was there any other language that
14 Mr. Queeney sent to you that you rejected?

15 A. No. The only changes I made were
16 correcting typos.

17 Q. Was there anything in the e-mail from
18 Mr. Queeney to you that explained why he needed
19 this or when he needed it?

20 A. No.

21 Q. You mentioned that the language in this

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1 paragraph came as an attachment to an e-mail; is
 2 that right?
 3 A. Right.
 4 Q. Did the e-mail itself have any text in
 5 it?
 6 A. I don't remember any. I mean, it must
 7 have been some transmittal sentence like please
 8 read this, get back to us with it.
 9 Q. Do you still have that e-mail?
 10 A. I suppose so.
 11 Q. Could I get a copy of it?
 12 A. Yes.
 13 MR. FISCHER: Bob, I would like to
 14 officially request that document.
 15 MR. QUEENEY: Okay.
 16 Q. Did you send an e-mail back?
 17 A. I think I sent something back saying
 18 okay, I have cleaned up the typos and I am faxing
 19 this back to you separately just so that whoever
 20 sent the e-mail would know to look for the fax.
 21 Q. Do you still have that e-mail that you

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1 sent to Mr. Queeney's office?
 2 A. I suppose it's in the computer
 3 somewhere.
 4 Q. Could I have that one also, please?
 5 A. Yes.
 6 THE WITNESS: I mean, to the extent
 7 that you can, would you provide these to me?
 8 MR. QUEENEY: Yes.
 9 Q. Did you have any questions about why
 10 this was needed?
 11 A. No.
 12 Q. Did you have any question about when it
 13 was needed?
 14 A. I assumed it was needed pretty quickly
 15 because this deposition was coming up, and I'm
 16 familiar enough with the legal process to know
 17 that you want to put these kinds of things on the
 18 table before a deposition if you want the
 19 deposition to ever end.
 20 MR. QUEENEY: Exactly.
 21 A. And so I assumed that it needed to be

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1 done right away. Once I saw it, I took care of
 2 it.
 3 Q. Am I right that you didn't have any
 4 communication with Mr. Queeney other than that
 5 exchange of e-mails?
 6 MR. QUEENEY: Objection.
 7 A. I talked to someone in his office at
 8 some point. I think it was about other things,
 9 but actually I don't think I ever talked to
 10 Mr. Queeney yesterday at all. I talked to other
 11 people or communicated with other people in his
 12 office about basically sending this thing back
 13 and forth and the arranging to find out where and
 14 when the deposition was which I didn't learn
 15 until sometime late yesterday afternoon.
 16 Q. Would it be fair to say, Doctor, that
 17 other than those two e-mails that we have
 18 discussed, you have had no communication with
 19 anyone from Mr. Queeney's office about the
 20 substance of Exhibit Number 2?
 21 A. That's correct. I mean, this wasn't

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1 the subject of any discussion really. I saw the
 2 thing. I understood, I thought, what it was
 3 for. I realized that it needed to be taken care
 4 of before today's deposition, and I looked at it,
 5 didn't have any problem with the language,
 6 cleaned up some spellings and sent it back.
 7 Q. Is that your general practice, Doctor,
 8 to have attorneys draft addendums to your reports
 9 and you sign them?
 10 A. It's unusual to have an addendum to a
 11 report, but these things can happen. I wouldn't
 12 say it's a usual practice or a usual thing
 13 because I can't recall another report that got
 14 submitted and then later had an addendum added to
 15 it, but, on the other hand, it doesn't strike me
 16 as irregular in any significant way. I mean, it
 17 doesn't concern me. As long as I am in control
 18 of anything that goes in with my signature and my
 19 name on it, it's okay. I mean, the lawyers, they
 20 can write whatever they want, but if I don't
 21 agree with it, I'm not going to sign it.

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1 Q. Is it fair to say, Doctor, that
2 Exhibit 2 is the entirety of what you have
3 referred to as the addendum to your report?

4 A. Yes.

5 Q. There's no citations contained in this
6 exhibit, right?

7 A. Right.

8 Q. There's no direction to any source
9 material, right?

10 A. Right.

11 Q. There's no indication what the basis is
12 for any of these opinions?

13 A. It's not contained in the report.
14 Obviously this is something that would be
15 established by evidence which would be largely
16 drawn from the Fourth Edition of my book which
17 has now been around for over five years.

18 Q. But we agree, Doctor, that there's
19 nothing in this addendum that indicates what the
20 basis is for any of these opinions, right?

21 A. That's right. The addendum doesn't. I

1 A. Right.

2 Q. And by being in control, that means
3 that you have the opportunity to add or detract
4 to it, right?

5 A. Right.

6 Q. And you didn't add a reference to your
7 book, right?

8 A. Right.

9 Q. And there are 916 pages in your book
10 without the index, right?

11 A. Right.

12 MR. FISCHER: Let me, for the record,
13 just indicate that Exhibit Number 2 was a fax
14 that was received in my office yesterday from
15 Robert W. Queeney of McBride Baker & Coles at
16 2:39 p.m. It made its way to my desk
17 approximately one hour after that.

18 I object to this document being
19 considered as any part of the reports that have
20 previously been submitted on Dr. Castleman's
21 behalf. I will do my best in this deposition to

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1 suppose if one wanted to be a little bit more
2 compulsive about it, the addendum would have
3 cited my book as reference, but I think that's
4 understood in this litigation, that my book is
5 out there, and attorneys such as yourself are
6 familiar with it.

7 Q. You had an opportunity to add or
8 detract from the paragraph that Mr. Queeney sent
9 to you, right?

10 A. Right, but I assumed that this is
11 something that is being submitted for legal
12 reasons, and I'm not somebody who concerns
13 himself with that aspect. I am a technical, a
14 scientific expert. I am not a legal expert, and
15 the lawyers have their own reasons for submitting
16 whatever reports and addendums and so on that
17 they submit to the courts in their
18 jurisdictions.

19 Q. But we agree, correct, that you were in
20 control of the substance of this addendum,
21 right?

1 question Dr. Castleman about what appears in
2 Exhibit Number 2, but I do object that less than
3 24 hours notice is entirely insufficient and
4 inconsistent with the federal rules, particularly
5 in light of the fact that we have a trial date
6 approaching in this case and a pretrial order due
7 a week from tomorrow.

8 As I said, I will do my best, but it is
9 without waiving any of my rights to depose
10 Dr. Castleman again. In fact, I think that
11 another deposition of Dr. Castleman will be
12 necessary in light of the fact that his opinions
13 have radically changed from his original report
14 which we have marked as Exhibit Number 1 to this
15 supposed addendum which we have marked as Exhibit
16 Number 2.

17 My ability to question Dr. Castleman is
18 also severely handicapped by the fact that there
19 are no citations and no materials referenced in
20 this addendum for me to determine what the basis
21 of Dr. Castleman's opinions are.

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1 MR. QUEENEY: I would, for the record,
 2 object to that statement. That's not a new
 3 opinion by any means. The first rendition of
 4 that opinion was rendered in our answers to
 5 interrogatories in November. That same opinion
 6 appears in his report, Exhibit Number 1. It is
 7 fully set forth in his book which is, as counsel
 8 has indicated on the record, maybe not on the
 9 record, he has read, and there are numerous
 10 citations which Dr. Castleman can summarily cite
 11 to right now looking at this book and support
 12 that same theory.

13 What's in that I would also say is,
 14 certainly from my reading of information I
 15 received last month or so from counsel,
 16 information that was put forward in a lawsuit in
 17 Bloomington, Illinois in which this individual,
 18 Mr. Fischer, was counsel of record, so there is
 19 absolutely nothing new there, but I'm going to
 20 save that, and let's get on with it.

21 MR. FISCHER: For the record, I

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1 disagree with Mr. Queeney's factual recitation.

2 BY MR. FISCHER:

3 Q. Dr. Castleman, let's talk about
 4 something that Mr. Queeney just said. He said
 5 that the opinions that are expressed in Exhibit
 6 Number 2 are contained in your book.

7 Did you hear him say that?

8 A. Something to that effect.

9 Q. That's not true, is it?

10 A. Well, the evidence on which the
 11 opinions are based is contained in the book. It
 12 is contained in a fairly compact form in Chapter
 13 9, company knowledge on Owens-Illinois which
 14 starts on 592 and ends on 600, so in the space of
 15 eight pages you have a fairly compact summary of
 16 Owens-Illinois' involvement with the Kaylo
 17 business.

18 Q. Dr. Castleman, at no point in your book
 19 do you state I am of the opinion that
 20 Owens-Illinois acted in concert with
 21 Owens-Corning Fiberglas; is that correct?

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1 A. That's correct. The book isn't that
 2 kind of a document. It is not a legal document.
 3 Q. At no point in your book, Doctor, do
 4 you state that Owens-Illinois and Owens-Corning
 5 Fiberglas each misrepresented the health hazards
 6 of Kaylo; is that right?

7 MR. QUEENEY: I am going to object. Do
 8 you mean is that specific wording used or does he
 9 reference each one individually which if you
 10 combine them there is an answer to your
 11 question?

12 Q. You can answer the question, Doctor.

13 A. Well, I make reference to I think the
 14 publication of the brochure that talks about
 15 Kaylo being nontoxic. There are repeated
 16 references to this business of Kaylo being
 17 marketed as a nontoxic product by Owens-Illinois
 18 in 1952 and also in a brochure published in
 19 1956. I see that in the brochure. I don't see
 20 it mentioned in the section on Owens-Illinois.

21 Q. Dr. Castleman, is it true that at no

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1 point in your book do you state that
 2 Owens-Illinois misrepresented the health hazards
 3 of Kaylo?

4 A. Well, I believe that marketing it as
 5 nontoxic misrepresented the hazards of Kaylo.

6 Q. I understand.

7 A. I don't say in the book -- I don't
 8 connect the dots in the book, but I present the
 9 evidence, both the evidence that Owens-Illinois
 10 was told by Dr. Vorwald that, quote, unquote,
 11 every precaution should be taken to protect
 12 workers against inhaling the dust and then months
 13 later Owens-Illinois selling Kaylo as nontoxic in
 14 a Petroleum Engineer magazine.

15 Q. Owens-Illinois was selling Kaylo in
 16 that magazine?

17 A. They were advertising Kaylo in their
 18 article that appeared in the same issue of the
 19 magazine, described it as nontoxic.

20 Q. At no point in your book, Doctor, do
 21 you state that Owens-Corning Fiberglas

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1 misrepresented the health hazards of Kaylo; is
2 that right?
3 MR. QUEENEY: Objection.
4 A. I don't use those words, that's right.
5 MR. QUEENEY: Just for the record, that
6 article he just referred to is the one that you
7 promised me about two weeks you were going to get
8 to me which is the article by Mr. Schuman.
9 MR. FISCHER: We can talk about that
0 later, Bob. I don't think that accurately
1 reflects our conversation.
2 MR. QUEENEY: I thought it did.
3 Q. Doctor, at no point in your book do you
4 say that Owens-Illinois substantially assisted
5 and encouraged such conduct by Owens-Corning
6 Fiberglas, and I am quoting from Exhibit 2; is
7 that right?
8 A. That's correct. I don't use that kind
9 of language in my book.
0 Q. And at no point in your book do you say
1 that Owens-Illinois provided substantial

1 products?
2 A. Yes. I think this language of nontoxic
3 and easy on the hands or nontoxic and not
4 irritating, this kind of language which
5 Owens-Illinois initially published in Petroleum
6 Engineer in 1952 was adopted in sales brochures.
7 I have seen including one from 1956 bearing the
8 trademarks of Owens-Illinois and Owens-Corning
9 and using the term nontoxic to describe the Kaylo
10 product, so here you see this language which
11 appears to have originated with Owens-Illinois
12 being adopted in a sales instrument by
13 Owens-Corning which was in 1956 the principal
14 agent for the sale of Kaylo in the United
15 States.
16 Q. Am I correct, Doctor, that you
17 understand that 1956 advertisement to be an
18 Owens-Corning advertisement?
19 A. Well, I see the trademarks of both
20 companies. I don't know how you draw the
21 distinction except if you say that Owens-Corning

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1 assistance to Owens-Corning Fiberglas in its
2 marketing and sale of Kaylo products? That's
3 also correct, right?
4 A. That's correct.
5 Q. At no point in your book, Doctor, do
6 you talk about Owens-Illinois assisting
7 Owens-Corning in any way, right?
8 MR. QUEENEY: Objection. You mean the
9 word literally, "assisting"?
0 A. I don't use the word assisting. I talk
1 about the fact that they had a relationship where
2 one company, Owens-Illinois, was the
3 manufacturer, and Owens-Corning was the principal
4 marketing agent for the product during the
5 1950s.
6 Q. Other than that period, Doctor, when
7 Owens-Illinois was manufacturing Kaylo and
8 Owens-Corning was selling it, is there anything
9 else that you point to as Owens-Illinois
0 providing substantial assistance to Owens-Corning
1 Fiberglas in its marketing and sale of Kaylo

1 was the marketing agent and, therefore, then
2 Owens-Corning was principally, or more than
3 Owens-Illinois, responsible for the language in
4 that instrument, but it seems like it tracks very
5 closely with the language previously developed by
6 Owens-Illinois in the Schuman article and in the
7 advertisement in Petroleum Engineer in 1952 a
8 year before Owens-Corning became the marketing
9 agent, the national marketing agent for the sale
10 of Owens-Illinois' Kaylo.
11 Q. It's fair to say, Doctor, with regard
12 to that 1956 advertisement that you have no idea
13 who wrote it, right?
14 A. That's right. I mean, the author, the
15 individual person who authored that, if it was
16 one person, I have never seen any documentation
17 showing who that would have been.
18 Q. And you don't know who employed that
19 person, right?
20 A. Right.
21 Q. You don't know who paid for the

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1 advertisement?
2 A. That's right. Well, I mean, it's a
3 brochure. I don't know who paid for it, printing
4 the brochure.
5 Q. And you don't know who paid for it to
6 be distributed or even if it was distributed,
7 right?
8 A. I don't know any of the details of the
9 brochure's distribution, whether it was done by
10 Owens-Corning only or whether it was also done by
11 Owens-Illinois, any of the details, that's right,
12 I don't.
13 Q. And you don't even know if it was, in
14 fact, distributed?
15 A. Well, I find it bizarre that such a
16 document would have been retained in the files of
17 either company and produced in discovery so many
18 years later if there was just one copy of some
19 brochure that was developed but for some reason
20 never used in marketing, and I have seen multiple
21 things. It's not just the one. There's a

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1 one-page brochure, but then there is a
2 several-page one that I have also seen that's a
3 little different than that one that also has the
4 same language about nontoxic in it, so it is not
5 just one brochure. It's more than one.
6 Q. Just sticking with the 1956 one for the
7 time being, you don't know for a fact that it was
8 ever distributed, right?
9 A. Right.
10 Q. You have never talked to anybody who
11 actually saw it contemporaneously, right?
12 A. Right.
13 Q. As a matter of fact, you have never
14 spoken to anyone who saw any of these references
15 to nontoxic that you are talking about
16 contemporaneously?
17 A. Right.
18 Q. With regard to your opinion in
19 Exhibit 2 here, Dr. Castleman, that
20 Owens-Illinois provided substantial assistance to
21 Owens-Corning Fiberglas in the marketing and sale

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1 of Kaylo products, other than the two things we
2 have talked about, is there anything else that
3 supports that opinion?
4 A. Well, it's those two things plus the
5 fact that Owens-Illinois was, after all, the
6 manufacturer of the product at the time that
7 Owens-Corning became the principal marketing
8 agent for the product.
9 Q. Right. That's 1953 to 1958, right?
10 A. Right. And I would have to assume --
11 now, the joint advertisements I mentioned on page
12 613 of my book, it's in the section on
13 Owens-Corning, not on Owens-Illinois.
14 Q. You have got no evidence that that is
15 actually a joint advertisement, right?
16 A. Well, I call it that because the
17 trademarks of both companies appear on the
18 advertisement. Technically you might be right.
19 Maybe it was an advertisement that was used in
20 marketing by Owens-Corning without any continuing
21 involvement by Owens-Illinois in the drafting of

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1 the language and so on, but as I was starting to
2 say, the fact that here Owens-Illinois is
3 manufacturing this product and they are making a
4 deal with Owens-Corning to be their marketing
5 agent for the product at some point after the
6 product is established, surely there's every
7 reason to assume that they would have provided
8 assistance to Owens-Corning unless there's
9 evidence to the contrary to make a success of
10 marketing the product which they continued to
11 manufacture and profit from the sale of for the
12 next five years.
13 Q. That is an assumption you are making,
14 right?
15 A. Right. I am assuming they are not
16 stupid businessmen.
17 Q. There are no facts that you can say
18 that supports that assumption?
19 MR. QUEENEY: Objection. Asked and
20 answered. Other than the relationship you mean?
21 A. I can't point to any specific documents

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1 that talk about how one company was very happy to
 2 help the other company or seek the help of the
 3 other company in getting the Owens-Corning
 4 marketing effort for Kaylo launched in the most
 5 successful manner. It's purely a matter of
 6 inference on my part that the appropriate people
 7 in the two companies would have worked together
 8 at that point to assure that there was a smooth
 9 transfer and that the marketing of the product
 10 would go on in a successful and financially
 11 successful way.

2 Q. You can't point to any specific
 3 instance of assistance being provided of
 4 Owens-Illinois to Owens-Corning, right?

5 A. Nothing beyond what I have said, no.

6 Q. The things that you have talked about,
 7 Doctor, are the things that would have occurred
 8 in this period 1953 to 1958, right?

9 A. Both the things we have talked about so
 10 far, yes.

11 Q. With regard to the substantial

1 testify about that.

2 Q. So you don't hold the opinion that
 3 Owens-Illinois was offering substantial
 4 assistance to Owens-Corning prior to 1953,
 5 right?

6 A. Well, all I am trying to say here is
 7 the deal wasn't done in one day, that there was
 8 probably a period of months, if not years, of
 9 discussions that went on, and people were getting
 10 connected in a way so that there could be a
 11 smooth and, from a business standpoint,
 12 successful transition in handing over this major
 13 marketing program to the people at
 14 Owens-Corning. I don't know the details of how
 15 that was done or how far back it went.

16 Q. Not only do you not know the details,
 17 you don't have any factual information about that
 18 at all, right?

19 A. Right.

20 MR. QUEENEY: I'm sorry. About?

21 A. About the business end of how, about

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1 assistance that you are talking about, you are
 2 relying on the state of affairs for 1953 to 1958;
 3 am I correct?

4 A. Well, but I am also talking about the
 5 1952 articles and articles and ads in the
 6 Petroleum Engineer as backdrop for this which
 7 provides some of the same language that one sees
 8 in the subsequent advertising materials for the
 9 product.

10 Q. Is it your opinion that Owens-Illinois
 11 was providing substantial assistance to
 12 Owens-Corning in 1952?

13 A. No.

14 Q. It is your opinion, as I understand it,
 15 that Owens-Illinois was providing substantial
 16 assistance to Owens-Corning in the marketing and
 17 sale of Kaylo products from the period 1953 to
 18 1958; is that right?

19 A. Right. And maybe in 1952, too, when
 20 they were setting the deal up, but I haven't seen
 21 the specific documentation on that, so I can't

1 how that marketing program went, that's right, I
 2 don't know those details. It has never been the
 3 subject of discovery that I have heard of anybody
 4 really trying to pursue, and I have never seen
 5 documentation relating to how the deal was done
 6 and how the Owens-Corning marketing of Kaylo was
 7 launched from a detailed technical standpoint.

8 Q. Have you ever reviewed the contract
 9 from 1953 by which the distribution arrangement
 10 between Owens-Illinois and Owens-Corning was
 11 established?

12 A. I may have seen the document, but these
 13 kinds of legal documents just make my eyes glaze
 14 over. I don't really grasp much from looking at
 15 them.

16 Q. Do you know if it has been made
 17 available to you?

18 A. I don't offhand remember whether it has
 19 or not. Like I said, this is not something that
 20 I would regard as -- it's not something that I
 21 would remember having sat down and read and said

<p style="text-align: right;">Page 90</p> <p>1 oh, yeah, there's a clause in this that says that 2 or doesn't. These are not documents that I read 3 with any great interest. 4 Q. To the extent you were trying to find 5 out about that relationship in 1953, it would 6 appear that the contract would be a logical place 7 to go, though, right? 8 A. Well, not necessarily. I mean, the 9 contract contains the specific legally agreed 10 upon terms of the deal, but it's just a 11 formalization of something which is basically 12 explained in one sentence in Moody's Industrial 13 Directory, as far as I am concerned. 14 Q. And have you asked Mr. Queeney for a 15 copy of that contract? 16 A. No. 17 Q. You don't really care what it says, 18 right? 19 A. Well, it doesn't interest me. I don't 20 think the details of what that says would be 21 particularly important to me.</p>	<p style="text-align: right;">Page 92</p> <p>1 pioneered in the use of that language, but I 2 haven't seen any correspondence between the 3 companies that constitute any discussion of 4 authorization in the manner that you are 5 raising. 6 Q. So it's fair to say that you don't have 7 any information to suggest that Owens-Illinois 8 authorized the use by Owens-Corning of the term 9 nontoxic to describe Kaylo? 10 MR. QUEENEY: Objection. Asked and 11 answered, and also ambiguous. 12 A. I really can't think of anything to add 13 to what I have already told you. 14 Q. We have talked about the ways you 15 believe Owens-Illinois and Owens-Corning 16 misrepresented the health hazards of Kaylo; is 17 that correct? 18 A. Yes. 19 Q. Does it consist entirely with this 20 reference to nontoxic? 21 A. Well, that and the failure to put</p>
<p style="text-align: right;">Page 91</p> <p>1 Q. Let's go back to your opinion that 2 Owens-Illinois provided substantial assistance to 3 Owens-Corning Fiberglas in its marketing and sale 4 of Kaylo products. 5 Is it fair to say, Doctor, that that 6 substantial assistance, in your opinion, ended in 7 1958? 8 A. I certainly don't know of them 9 providing any substantial, any assistance of any 10 kind after 1958. I think this is more a matter 11 of Owens-Illinois having most critically 12 developed this nontoxic language in the marketing 13 of the product earlier and Owens-Corning 14 continuing perhaps after 1958, perhaps not, to 15 carry that on. 16 Q. Doctor, you have no information or 17 other evidence to show that Owens-Corning's use 18 of the term nontoxic was authorized by 19 Owens-Illinois, do you? 20 A. Well, it looks to me like that the 21 people at Owens-Illinois were the ones who</p>	<p style="text-align: right;">Page 93</p> <p>1 warning labels on the product. 2 Q. Well, in Exhibit 2, Doctor, you have 3 separated misrepresentation and failure to warn, 4 so I would like to follow that convention, okay? 5 A. Sure. 6 Q. When you say that it is your opinion 7 that Owens-Illinois and Owens-Corning Fiberglas 8 each misrepresented the health hazards of Kaylo, 9 you are talking about that they each referred to 10 Kaylo as nontoxic, right? 11 A. Right. 12 Q. And there's not any other 13 misrepresentation that you are referring to 14 there? 15 MR. QUEENEY: Objection. Asked and 16 answered. You are misstating his prior 17 testimony. 18 A. Nothing comes to mind in terms of any 19 actual statements that they put out which were 20 misleading. 21 Q. Let's talk about failure to warn then.</p>

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A. Okay. That's the next.

Q. You indicate in the addendum, as we have been calling it, Exhibit 2 to your opinion, that Owens-Illinois and Owens-Corning failed to disclose or warn that Kaylo insulation products could cause asbestosis and cancer, right?

A. Right.

Q. And with regard to Owens-Illinois, let's start that they didn't put a warning on the product, right?

A. Right.

Q. Now, Owens-Corning eventually did put a warning on the product, right?

A. Yes.

Q. When did that happen?

A. I think the health warning went on in 1970. By health warning, I mean a warning that in some way, however understated, said that breathing the dust from the product could cause health damage.

Q. Was there any other warning on

Q. That is your term?

A. Right.

Q. And the 1966 language was, as far as you know, something along the lines of don't create dust?

A. I'm trying to remember what it was. I don't think I even made a note of it because -- no, I don't think I did say anything about it in my book. I've seen these statements. I recall in my Owens-Corning file a 19, I think they call it a 1966 statement on the product that said something about keep the dust down but didn't say what would happen to you if you breathed it and then in 1970 a more, a modified statement, and this is supported by correspondence that I do refer to on page 612 where the company doctor, Jon Konzen, is corresponding and saying they really should be labeling the product from a health standpoint, and this is in September of 1970.

Q. Is it your belief, Doctor, that there

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Owens-Corning Kaylo prior to 1970?

A. Well, they had statements on the box like "fragile", "do not drop", stuff like that, "use no hooks" and then smaller language, maybe something about do not create too much dust, but in the initial round, the first round of that, they didn't say what would happen from breathing the dust, so I don't count that as a health warning.

Q. When was that first round? When did those warnings appear?

A. The company I think claims that they started, claimed that they started to put these non-health dust warnings on around 1966, as I recall.

Q. Now, when you say "the company", there you are referring to Owens-Corning, right?

A. Right.

Q. And Owens-Corning didn't call them non-health warnings, right?

A. Right.

1 was a health warning on Owens-Corning Kaylo in 1970, right?

A. Right.

Q. And prior to 1970 there was a warning about the creation of dust, right?

A. Right.

Q. Did the pre-1970 language also say that the product contained asbestos?

A. I don't think so. I really don't remember what it said.

Q. You don't include that information in your book, right?

A. No.

Q. I am correct, it's not in your book?

A. That's correct. The specific language of warnings, the only specific language of warnings that I include that I remember are the OSHA warning label requirement, I think, and the Johns-Manville warning label which was the first one to appear on widely distributed thermal insulation in this country in 1964, but I don't

<p style="text-align: right;">Page 98</p> <p>1 make a point of trying to reproduce information 2 in my book about when each of the manufacturers 3 put warnings on and what the exact language of 4 the warnings was. 5 Q. You mentioned Johns-Manville, their 6 product, their thermal insulation product was 7 Thermobestos, right, -- 8 A. That is one of them, yes. 9 Q. -- among other others? 10 Thermobestos was the pipe insulation? 11 A. Yes. 12 Q. It had a warning in 1964, right? 13 A. Yes, it did. 14 Q. What did that warning say? 15 A. This is on 386. "This product contains 16 asbestos fiber. Inhalation of asbestos in 17 excessive quantities of long periods of time may 18 be harmful. If dust is created when this product 19 is handled, avoid breathing the dust. If 20 adequate ventilation control is not possible, 21 wear respirators approved by the U.S. Bureau of</p>	<p style="text-align: right;">Page 100</p> <p>1 make passing reference to some of that in my 2 book. In Chapter 9 I talk about the individual 3 companies, and the case of some of their products 4 I make reference to warning labels, so there's 5 probably a few other companies that are in here 6 that there's something in there about -- I recall 7 there was one company I said something about them 8 using warning labels in 1970 because I thought 9 that was kind of late, and there was a specific 10 document that related to it. Maybe it was GAF 11 Corporation. I don't remember now. 12 Q. Doctor, is it fair to say that after 13 1958 you have no information or reason to believe 14 that Owens-Illinois and Owens-Corning agreed in 15 any way to sell or market Kaylo? 16 A. Well, I have no specific documents that 17 speak to that point, right. 18 Q. And you are aware of no sworn testimony 19 that speaks to that point, right? 20 A. Right. 21 Q. You are aware of no discovery answer or</p>
<p style="text-align: right;">Page 99</p> <p>1 Mines for pneumoconiosis-producing dusts." 2 So they were trying to teach the 3 readers of these labels a new word, probably. 4 Q. That label appeared on every box of 5 Thermobestos sold after 1964? 6 A. I understand that that label was used 7 starting in 1964 and thereafter, yes, by 8 Johns-Manville on Thermobestos. 9 Q. Was there ever a label placed on 10 Pabco? 11 A. I don't know. 12 Q. Was there ever a label placed on 13 Unibestos? 14 A. I don't know. 15 Q. Was there ever a label placed on any 16 other asbestos-containing pipe insulation that 17 you are aware of? 18 A. Well, let's see. I believe there were 19 labels placed on some of these products at 20 various points in time, but I really don't know 21 the specifics. I think -- and I talk about, I</p>	<p style="text-align: right;">Page 101</p> <p>1 other litigation material that speaks to that 2 point, right? 3 A. Right. 4 Q. And you are aware of -- well, we 5 already said you have never spoken to anyone from 6 Owens-Illinois, right? 7 A. Right. 8 Q. You never spoke to any Owens-Corning 9 employees, right? 10 A. I can't recall having spoken to any. 11 Q. There was never any Owens-Corning 12 employee who told you that they had been in an 13 agreement with Owens-Illinois in connection with 14 Kaylo at any point in time after 1958, right? 15 A. That's correct. 16 Q. Have you ever studied the relative 17 market shares for asbestos-containing products? 18 A. No. 19 Q. Would you agree with me that 20 Johns-Manville was the dominant player in the 21 United States with regard to asbestos-containing</p>

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products?

A. I don't know. I mean with asbestos-containing products generally, I'm sure that was true. With respect to specific types of products and market shares, I don't know.

Q. Have you ever studied what Owens-Illinois' market share was during the time period that it was selling Kaylo?

A. No.

Q. We agree at least that by 1970 both Johns-Manville and Owens-Corning sold their asbestos-containing insulation products with what you would call a health warning, right?

A. Yeah. It was a minimal health warning but a health warning, nonetheless.

Q. Doctor, have you ever been employed by a for-profit corporation?

A. Yes. I worked for Hercules, Incorporated in 1968 and '69, a chemical company. That was what I was referring to earlier this morning.

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Q. And what was your role there?

A. I was a chemical engineer in the research center in process and product development.

Q. Other than your time period at Hercules, have you ever worked for a for-profit corporation?

A. Not as a full-time employee.

Q. How about as a part-time employee?

A. I think I have done well very limited work for companies over the years. I think as a consultant, one company came to me at some point, and they were thinking about using asbestos or buying a company that made asbestos products, and they somehow found me, and they ran it by me, and I told them what I knew and what I thought, and then they paid me some small sum for that.

Q. You were not an employee of that company, right?

A. No.

Q. I was specifically talking about any

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1 work that you have done as an employee as opposed
2 to a consultant. Have you ever worked as an
3 employee on a part-time basis for a for-profit
4 corporation?

5 A. Aside from summer jobs before I got out
6 of college, no.

7 Q. You have never been --

8 MR. QUEENEY: Let me say one thing. I
9 have got to call my office sometime before 1:00
10 o'clock our time, so sometime between now and the
11 next 20 minutes if you could stop for lunch.

12 MR. FISCHER: Whenever you would like
13 is fine.

14 MR. QUEENEY: 10, 15 minutes is fine.

15 A. You're going to be a while?

16 Q. I think we will go a while longer.

17 You have never been a director for a
18 for-profit corporation, right?

19 A. No.

20 Q. I am correct, right?

21 A. That's correct.

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1 Q. You are not a medical doctor?

2 A. That's correct.

3 Q. You don't have any training in
4 medicine; is that correct?

5 A. My only appearance in medical school
6 has been as a guest lecturer. My training in
7 medicine is not medical training, but to the
8 extent that medicine is part of public health, I
9 have training in a sense. My Doctorate is from
10 the Johns Hopkins School of Public Health. Many
11 of the students that were in my classes were
12 physicians. Public health is a multidisciplinary
13 field encompassing such things as medicine,
14 engineering, law and economics, and I have taken
15 courses on specific types of occupational lung
16 diseases and things like that but not in a
17 typical formalized conventional sense do I have
18 training in medicine. I have never been a
19 student in medical school.

20 Q. You are not an industrial hygienist,
21 right?

<p style="text-align: right;">Page 106</p> <p>1 A. The answer would be similar as for 2 medicine. I have had training in industrial 3 hygiene in such things as the design of 4 industrial ventilation systems, but I am not per 5 se an industrial hygienist. It is just one of 6 the tools of my trade that I have this kind of 7 background. 8 Q. You have never worked as an industrial 9 hygienist, right? 10 A. That's right. 11 Q. Do you have any training in 12 epidemiology? 13 A. Yes. 14 Q. What training? 15 A. Well, I have taken a number of courses 16 at the Johns Hopkins School of Hygiene and Public 17 Health, and I have lectured about epidemiology in 18 some of the presentations I have made at the 19 School of Public Health. I am constantly 20 evaluating epidemiology studies in the field of 21 regulation, the field of public health</p>	<p style="text-align: right;">Page 108</p> <p>1 right? 2 A. I have studied outside of asbestos, but 3 my involvement in the study of corporate behavior 4 has been in the field of toxic substances, 5 control and public health. It goes well beyond 6 asbestos. 7 Q. Would it be fair to say that outside 8 the field of public health you have never studied 9 corporate behavior? 10 A. Yes, that's right. 11 Q. I want to go back to Exhibit Number 2, 12 and in Exhibit 2 there is a clause here about 13 midway through that provides "Owens-Illinois 14 substantially assisted and encouraged such 15 conduct by Owens-Corning Fiberglas". Do you see 16 what I am referring to? 17 A. Yes, I see what you are pointing at. 18 Q. The "such conduct" in that clause, does 19 that refer back to the, in your opinion, 20 misrepresentations and failure to warn? 21 A. Yes.</p>
<p style="text-align: right;">Page 107</p> <p>1 protection. 2 Q. Have you ever performed or directed an 3 epidemiological study? 4 A. No. 5 Q. Have you ever published an 6 epidemiological study? 7 A. No. 8 MR. FISCHER: If you want to break, we 9 can do it now. That's fine. 10 MR. QUEENEY: Okay. 11 (Luncheon recess -- 12:25 p.m.) 12 (Afternoon session -- 1:20 p.m.) 13 BY MR. FISCHER: 14 Q. Dr. Castleman, you have no education or 15 training in business organizations; is that 16 right? 17 A. Right. 18 Q. And you do not have an M.B.A.? 19 A. Right. 20 Q. You have never studied corporate 21 behavior outside of the context of asbestos,</p>	<p style="text-align: right;">Page 109</p> <p>1 Q. Does it refer to anything else? 2 A. No. 3 Q. Can we put a time period on that? When 4 did Owens-Illinois substantially assist and 5 encourage such conduct? 6 A. It would be from the time that they 7 first got involved with Owens-Corning. I don't 8 know when it began. Formally it began in 1953. 9 Probably it began, you know, sometime before 10 that, and as far as encouraging and assisting 11 after 1958, that would be based on the failure to 12 take any action to prevent the continuing sale of 13 Kaylo in ways that that would damage people's 14 health. 15 Q. Your opinion is that, Doctor, that 16 encouragement and substantial assistance began in 17 1953, perhaps slightly earlier if they were 18 discussing the contract before it was actually 19 signed, right? 20 A. Right. 21 Q. And it is unclear on when you say that</p>

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1 encouragement and substantial assistance ended?

2 A. Right.

3 MR. QUEENEY: Objection. Do you want
4 to break it out? It's a compound question. The
5 two are different.

6 Q. When did the encouragement and
7 substantial assistance end?

8 A. I really don't know. I just know that
9 the failure of Owens-Illinois to take any steps
10 after 1958 enabled Owens-Corning to continue to
11 sell the product without warning labels and
12 enabled Owens-Corning to market the product as a
13 nontoxic product.

14 Q. Is it fair to say, Doctor, that you are
15 aware of no affirmative act on behalf of
16 Owens-Illinois after 1958 that you would
17 characterize as either encouragement or
18 substantial assistance to Owens-Corning in its
19 sale and marketing of Kaylo?

20 A. Correct.

21 Q. And then do I understand your testimony

1 A. Right.

2 Q. You are simply assuming that
3 Owens-Illinois encouraged Owens-Corning to behave
4 in a certain way?

5 A. Well, that they failed to signal any
6 change of course.

7 Q. What investigation have you done to
8 determine that Owens-Illinois failed, as you say,
9 to signal any change of course?

10 A. Again, I would only be in a position of
11 seeing documents if there were any from
12 Owens-Illinois showing that Owens-Illinois did
13 try to limit the continuing harm that was going
14 to be associated with the sale of Kaylo by taking
15 some definite action, and I haven't seen any sign
16 or evidence that they did take any action.

17 Q. Will you agree, Doctor, that you
18 haven't done any independent investigation to
19 find out?

20 MR. QUEENEY: Objection to the term
21 "independent investigation".

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1 that it's your opinion that after 1958
2 Owens-Illinois', in your opinion, failure to act
3 consists of encouragement, substantial assistance
4 in Owens-Corning's sale and marketing of Kaylo?

5 A. Sort of the other way around. Their
6 encouragement consisted of failure to act. They
7 were also owning 30 or so percent of
8 Owens-Corning while the sale of this hazardous
9 product went on.

10 Q. It is your opinion that by doing
11 nothing, Owens-Illinois was encouraging
12 Owens-Corning to behave in a certain way?

13 A. Yes. At least they were enabling them
14 to behave in that way.

15 Q. So it is your opinion that enabling
16 consists of substantial assistance?

17 A. I don't know. Sure.

18 Q. Dr. Castleman, you have no information
19 about what communication there may have been
20 between Owens-Illinois and Owens-Corning after
21 1958, right?

1 A. That's true in that I haven't -- you
2 know, I don't even know how I would find out
3 something like that out. Basically it would be
4 if there's any documentation that bears on the
5 subject, it would be in the possession of
6 Owens-Illinois and possibly Owens-Corning.

7 Q. So you just have no information one way
8 or the other, right?

9 A. Right.

10 Q. Doctor, you are not a lawyer, right?

11 A. Right.

12 Q. You don't hold yourself out as a legal
13 expert?

14 A. No, but law, as I say, as I have said
15 with medicine and industrial hygiene, is also one
16 of the things we use in public health. To some
17 extent I've had to become familiar with the use
18 of the law as a public health instrument.

19 Q. We have already talked about the fact
20 that Mr. Queeney drafted the paragraph in
21 Exhibit 2, right?

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1 A. Right.

2 Q. And he chose the words substantially
3 assisted and encouraged, right?

4 A. He did.

5 Q. You did not choose those words?

6 A. That's right. I mean, these were words
7 that presumably apply to the way the law is
8 written in the State of Illinois, and it was
9 basically put to me do you agree with this, would
10 you sign a statement that says this.

11 Q. And when you said that you agreed and
12 would sign it, you are unaware of any special
13 legal meaning of any of those words, right?

14 A. Well, I mean, I read the words in the
15 ordinary sense of what they say in plain
16 English. I don't have any legal training that
17 goes much beyond that.

18 Q. And the words substantially assisted as
19 they appear on your report are not meant by you
20 to bear any special legal context, right?

21 A. No. They are words that I mean here in

1 not contending that they controlled

2 Owens-Corning. Certainly if Owens-Illinois told
3 Owens-Corning something, it would have been taken
4 seriously in the sense that they were a major
5 stockholder, but the extent of their possible
6 control over Owens-Corning isn't something that I
7 feel I could comment about aside from stating the
8 facts of the ownership that they had.

9 Q. You are not offering an opinion one way
10 or the other about whether Owens-Illinois
11 controlled Owens-Corning after 1958, right?

12 A. Right.

13 Q. The first line, Doctor, in Exhibit 2
14 provides "to clarify my prior report, I am of the
15 opinion that Owens-Illinois acted in concert with
16 Owens-Corning Fiberglas", right?

17 A. That's what it says.

18 Q. And is it fair to say, Doctor, that
19 then after that portion that I read, you go on to
20 describe the ways in which you believe
21 Owens-Corning and Owens-Illinois acted in

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1 the ordinary usage of the English language, not
2 in any kind of a specialized legal sense, that's
3 right.

4 Q. After 1958, Doctor, we have already
5 talked about your opinion being based on what you
6 assume to be Owens-Illinois' failure to indicate
7 a change in course with regard to Kaylo.

8 Is there anything else that supports
9 your opinion that Owens-Illinois substantially
10 and assisted, sorry, substantially assisted and
11 encouraged such conduct by Owens-Corning
12 Fiberglas?

13 A. I can't think of anything else.

14 Q. Is it your opinion, Doctor, that
15 Owens-Illinois somehow controlled Owens-Corning
16 Fiberglas after 1958?

17 MR. QUEENEY: Objection to the term. I
18 ask you to define it in some sense.

19 A. Well, I have certainly seen in business
20 circles ownership of less than 30 percent
21 referred to as a controlling interest, but I am

1 convert?

2 A. Yes.

3 Q. Are there any other ways you believe
4 Owens-Corning and Owens-Illinois acted in concert
5 with respect to asbestos-containing products that
6 are not stated in Exhibit 2?

7 A. Well, they both were using the services
8 of the Saranac Laboratory. There were things
9 where there were opportunities for different
10 types of concerted action to occur.
11 Owens-Illinois was sponsoring research at
12 Saranac. Other companies were sponsoring studies
13 on asbestos dust.

14 In 1948 I think Vorwald reported to
15 Owens-Illinois that, by the way, I am doing some
16 research for some other companies and I'm telling
17 you that even small amounts of asbestos fiber
18 surviving in the airborne dust are capable of
19 inducing fibrosis in experimental animals.

20 Q. Vorwald didn't quantify that, quote,
21 small amounts, right?

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1 A. I forget the exact language he used. I
2 might have it here. I am referring to my book.
3 I make reference to a 1948 report about one of
4 the interim reports where the Saranac Lab was
5 first giving the bad news about Kaylo causing
6 asbestosis in guinea pigs, and the report I say,
7 also noted that, quote, "very small numbers of
8 fibers are capable of producing asbestosis".

9 Q. You don't have Dr. Vorwald's writing in
0 front of you, right? You are reading from your
1 book?

2 A. Right.

3 Q. And so you don't have the complete
4 document there, right?

5 A. Right.

6 Q. Dr. Vorwald did not quantify what he
7 meant by small, did he?

8 MR. QUEENEY: Objection. Misstates the
9 document.

0 A. Well, the number certainly doesn't
1 appear on page 595. Let me just take a look real

1 line of questions? Because I want to make an
2 objection. I don't want to suggest anything.
3 Are you through with that line of questions with
4 respect to that one document?

5 MR. FISCHER: No.

6 MR. QUEENEY: Okay. Let me know. Do
7 you have that document with you?

8 MR. FISCHER: What document are you
9 talking about?

10 MR. QUEENEY: The one he is talking
11 about.

12 A. The 1948 report.

13 MR. QUEENEY: The October 30th, 1948
14 report.

15 MR. FISCHER: No, I don't have that
16 interim report with me.

17 MR. QUEENEY: Off the record.
18 (Discussion off the record.)

19 BY MR. FISCHER:

20 Q. Doctor, I want to narrow my question a
21 little bit just so we make sure that we are on

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1 quick. It refers also to a section in Chapter
2 4. I have a slightly expanded quote here. This
3 is on 317. I note that Vorwald reported to OI
4 about Saranac studies done for the asbestos
5 companies, another group of companies that,
6 quote, "a seemingly negligible proportion of
7 fibrous asbestos is sufficient to produce
8 fibrosis", and that Vorwald went on. "It appears
9 that very small numbers of fibers are capable of
0 producing asbestosis. Although the development
1 of the lesions is delayed, the present experiment
2 with Kaylo is also an example of this fact".

3 Q. Let me ask you again, Doctor.

4 Dr. Vorwald never quantified what he meant by
5 small or by negligible, right?

6 A. I don't think so. I'd have to refer to
7 the report to be sure, but I don't think so.

8 Q. At least you don't think that he did,
9 right?

0 A. Right.

1 MR. QUEENEY: Are you through with that

1 the same page.

2 In Exhibit 2 you say "I am of the
3 opinion that Owens-Illinois acted in concert with
4 Owens-Corning Fiberglas", and then you go on to
5 describe specific ways which you believe that
6 occurred, right?

7 A. Yes.

8 Q. Are there any other ways that you
9 believe Owens-Illinois and Owens-Corning acted in
10 concert other than what you have signed in
11 Exhibit 2?

12 A. Nothing comes to mind.

13 Q. Now let's talk about the broader
14 universe of people that you believe acted in
15 concert, okay?

16 A. Okay.

17 Q. Was there anyone else acting in concert
18 with Owens-Illinois and Owens-Corning in the ways
19 that you have described in Exhibit 2?

20 A. No. What is described in Exhibit 2 is
21 specifically the ways in which Kaylo was put on

<p style="text-align: right;">Page 122</p> <p>1 the market.</p> <p>2 Q. You have testified before that it is</p> <p>3 your opinion that there was a conspiracy of</p> <p>4 silence, right?</p> <p>5 A. Yes.</p> <p>6 Q. That's not what you are talking about</p> <p>7 in Exhibit 2?</p> <p>8 A. No. What's in Exhibit 2 is specific to</p> <p>9 the things that are discussed in item, in</p> <p>10 Exhibit 2 specifically relating to Kaylo.</p> <p>11 Q. There were many asbestos-containing</p> <p>12 products on the market prior to 1960, right?</p> <p>13 A. Right.</p> <p>14 Q. Hundreds of them, right?</p> <p>15 A. Yes.</p> <p>16 Q. And none of them contained a warning?</p> <p>17 A. That's right. That's why there were so</p> <p>18 many of them.</p> <p>19 Q. In the broader conspiracy of silence,</p> <p>20 Doctor, is it fair to say that it's your opinion</p> <p>21 that everybody who was manufacturing or selling</p>	<p style="text-align: right;">Page 124</p> <p>1 or warn their employees and contract employees</p> <p>2 that they brought on to their premises about</p> <p>3 these hazards.</p> <p>4 Q. Is it fair to say, Doctor, that you are</p> <p>5 aware of no express agreement amongst any of</p> <p>6 these companies not to warn?</p> <p>7 A. That's right. I mean, these are not</p> <p>8 things that get written down.</p> <p>9 Q. And you are aware of no express</p> <p>10 agreement between Owens-Illinois and</p> <p>11 Owens-Corning not to warn, right?</p> <p>12 A. Right.</p> <p>13 Q. You are aware of no express agreement</p> <p>14 between Owens-Illinois and Owens-Corning about</p> <p>15 anything in relation to Kaylo, right?</p> <p>16 A. Right. Aside from the fact that they</p> <p>17 obviously had a marketing agreement in 1953 and a</p> <p>18 sale of good manufacturing business in 1958, I</p> <p>19 don't know about the details of their business</p> <p>20 arrangements.</p> <p>21 Q. To the extent that you have the opinion</p>
<p style="text-align: right;">Page 123</p> <p>1 an asbestos-containing product prior to 1960 was</p> <p>2 a participant?</p> <p>3 A. Not everybody, but quite a few</p> <p>4 companies were.</p> <p>5 Q. Quite a few meaning everyone who --</p> <p>6 well, help me out, Doctor. Where do you draw the</p> <p>7 line?</p> <p>8 A. I draw the line -- you know, certainly</p> <p>9 the conspiracy of silence would include companies</p> <p>10 that I know had actual knowledge about the</p> <p>11 hazards of asbestos and weren't warning people</p> <p>12 about it, weren't taking steps to protect their</p> <p>13 own employees from it, weren't putting warning</p> <p>14 labels on the products in any way. Those are the</p> <p>15 main participants. And then there are other</p> <p>16 companies that I include as participants in the</p> <p>17 conspiracy of silence that would include major</p> <p>18 uses of asbestos products who also demonstrably</p> <p>19 knew about the hazards of the products, some big</p> <p>20 oil companies and steel companies, for example,</p> <p>21 and didn't appear to take any measures to protect</p>	<p style="text-align: right;">Page 125</p> <p>1 that Owens-Illinois and Owens-Corning acted in</p> <p>2 concert, that concert of action is something that</p> <p>3 you infer from things that you have read, right?</p> <p>4 A. Yes.</p> <p>5 Q. And you are not better or worse at</p> <p>6 inferring facts than anyone else, right?</p> <p>7 MR. QUEENEY: Objection to the form.</p> <p>8 Do you mean someone who has read some of the</p> <p>9 facts he has read or all of the facts he has read</p> <p>10 over the last 25 years?</p> <p>11 Q. You can answer that.</p> <p>12 A. You can present different factual</p> <p>13 material to different people, and their ability</p> <p>14 to understand what it means is going to be</p> <p>15 different depending on their background and the</p> <p>16 totality of their knowledge and experience, and I</p> <p>17 believe that my investigations of the role of</p> <p>18 corporations in the field of occupational health</p> <p>19 and environmental health and toxic substances</p> <p>20 control over the past 30 years enables me to</p> <p>21 infer with considerable insight sometimes that a</p>

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1 lot of people don't have about what's going on.

2 Q. Let's just start with the abstract
3 question, okay? You are not a better inference
4 drawer than other people, right?

5 MR. QUEENEY: Objection. Asked and
6 answered. He talked about his experience,
7 education.

8 A. If you are talking about the ordinary
9 things of life, no. I'm just another citizen.
10 If you are talking about the things that I have
11 spent my life being trained on and professionally
12 knowledgeable about, then that's a different
13 story.

14 Q. For right now I am just talking about
15 the ordinary affairs of life. You have no
16 special gift with regard to drawing inferences,
17 right?

18 A. I suppose not. I mean, I bring to
19 every situation my intelligence and experience,
20 but other people do the same, and if it's just
21 walking into a new train station and trying to

1 understanding than the average person of how the
2 business world works?

3 A. Only in the context of occupational and
4 environmental health I am saying I have an
5 understanding of how it works.

6 Q. You have never studied it from the
7 business person's perspective, right?

8 MR. QUEENEY: Sorry. What?

9 A. I haven't studied the operation of
10 businesses from the perspective of business
11 managers. I have studied it from the perspective
12 of someone in the field of public health.

13 Q. Doctor, it's fair to describe you as an
14 environmental consultant, right?

15 A. Yes.

16 Q. A big part of your job is investigating
17 companies that are defendants in asbestos
18 litigation?

19 A. It has been at times, yes. I mean,
20 most of that work has been done. The Fourth
21 Edition of my book was published more than five

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1 figure out where the street exit is, we are all
2 kind of in the same boat.

3 Q. As you have mentioned, you spent the
4 vast majority of your working life studying
5 corporate response to occupational hazards,
6 right?

7 A. Yes.

8 Q. And you believe that that gives you a
9 greater ability to draw inferences, right, than
10 the average person?

11 A. Yes.

12 Q. You believe that your inferences are
13 better than what the average person would draw?

14 A. Well, they are more qualified in the
15 sense that they are based on a great deal of
16 study and investigation over very many years and
17 the gradual development over those years of
18 certain understandings about the way the business
19 world works and public health consequences of
20 some of the things that go on.

21 Q. Why do you think you have a better

1 years ago, and I don't spend a great deal of time
2 doing investigations. Basically what we know
3 about Owens-Illinois, for example, has been known
4 for probably the last 15 years, almost all of it.

5 Q. A lot of which you do is talk to other
6 people who are affiliated with plaintiffs in
7 asbestos litigation?

8 A. That's one of the things I do.

9 Q. People like plaintiffs' lawyers,
10 right?

11 A. Right.

12 Q. Other experts who traditionally testify
13 for plaintiffs, right?

14 A. Well, I have interactions with people
15 like that. I don't talk to other plaintiffs'
16 experts a great deal about asbestos litigation.
17 I mean, I have dealt with Arthur Frank, for
18 example, on a number of occasions, but it has had
19 to do most recently with the problem of asbestos
20 in India where we both appeared at a conference
21 last February in New Delhi and the other problems

<p style="text-align: right;">Page 130</p> <p>1 associated with such things as the pesticide 2 atrazine and its hazards and uses. 3 Q. Earlier, Doctor, you explained that one 4 of the ways you learned things that you base your 5 opinions on is the materials find their way to 6 you, right? 7 A. Well, I was talking about corporate 8 documents in that sense, yes. 9 Q. And one of the ways corporate documents 10 find their way to you is that plaintiffs' lawyers 11 give them to you, right? 12 A. I am presented with corporate documents 13 by both sides in the asbestos litigation, but 14 yes, plaintiffs' lawyers and defense lawyers. 15 Q. And you also have received documents 16 from other people who have both traditionally 17 been associated as plaintiffs' experts in the 18 asbestos litigation, right? 19 A. Over the years, yes. That has also 20 happened. 21 Q. And you have also obtained documents</p>	<p style="text-align: right;">Page 132</p> <p>1 A. The ones that relate to the historic 2 conduct of companies involved in asbestos 3 litigation, I usually get paid for work on that, 4 but for my investigations of what's going on all 5 over the world with asbestos today, I usually 6 don't get paid for that. I spend more time on 7 that. I'm just glad that I don't have to worry 8 about making enough money to pay my rent and I 9 can afford to give away that much time. 10 Q. You do get paid for your testimony, 11 right? 12 A. Usually, yes. 13 Q. And you get paid for the investigations 14 that you do that relate to your testimony? 15 A. Usually I do, yes. 16 Q. It's the vast majority of your annual 17 income, right? 18 A. Yes, it is. 19 Q. Over the past 15 years it has probably 20 been 95 percent of your annual income? 21 A. Right. As I say, most of my public</p>
<p style="text-align: right;">Page 131</p> <p>1 during the course of your own investigations, 2 right? 3 A. Right. 4 Q. And those investigations have been paid 5 for by plaintiffs' counsel, right? 6 MR. QUEENEY: Which investigations? 7 His own? Plaintiffs' experts? What? 8 Q. You can answer, Doctor. 9 A. My investigations have often been paid 10 for by plaintiffs' lawyers. Not always. When I 11 was writing my Doctoral thesis, I would 12 occasionally investigate things that no one was 13 paying me to investigate. I did it as a matter 14 of completeness in writing my Doctoral thesis. 15 Of course, I do lots of investigations for which 16 I don't get paid by anybody. That's what I spend 17 most of my time on. 18 Q. It would be fair to say that with 19 regard to your investigations that relate to 20 asbestos in any way, you are getting paid for 21 those, right?</p>	<p style="text-align: right;">Page 133</p> <p>1 health work is modestly remunerated, and that is 2 what I spend most of my time on. 3 Q. Do you get paid for preparing to 4 testify? 5 A. I don't have to spend too much time 6 preparing to testify, but, yes, if there's some 7 hours spent on the eve of trial, I will often fly 8 in the night before, have dinner with the 9 plaintiff's lawyer or the lawyer, whoever, and I 10 would charge for the several hours that were 11 spent just sort of getting ready to testify the 12 next day. 13 Q. And you also get paid for that travel 14 time, right? 15 A. Yes. 16 Q. Doctor, do you do any consulting for 17 which you are paid that is unrelated to asbestos 18 litigation? 19 A. Oh, well, I recently worked in a case 20 involving the European Commission at the World 21 Trade Organization. The hearing was held in</p>

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January of the year 2000, and there were documents before and after that had to be reviewed and comments submitted, and I was involved as a scientific adviser to the European Commission as was the case where Canada was challenging the ban on asbestos by France, and I was hired as a scientific expert by one party in the case by the European Commission defending France, and I wound up going over to Geneva on one occasion, spending many hours working on the case, made the grand sum of \$10,000 for my labors, and there periodically are small honoraria and things like that that I am paid for.

Q. The work for the European Commission that you talked about was related to asbestos, right?

A. Right. It wasn't related to asbestos litigation in the sense that we are talking about civil litigation here, but it was related to asbestos.

1 and the Collegium Ramizini in Italy, and most of
2 them I didn't get paid for, but the one at
3 Harvard I was supposed to get paid a couple
4 thousand dollars which I suppose I will
5 eventually get paid.

6 Q. So far you haven't been paid?

7 A. Not yet.

8 Q. What's your current rate, Doctor?

9 A. My current rate for litigation-related
10 work is \$300 an hour.

11 Q. Is it fair to say, Doctor, you probably
12 have been averaging about 10 trials a year for
13 the last 20 years?

14 A. Yes.

15 Q. How about depositions? How many times
16 do you think you have been deposed in 20 years?

17 A. Over 200. It has been more lately.
18 Last year was a record. I think there were over
19 30 depositions. I think it's because of the
20 increased amount of litigation and the different
21 defendants becoming involved.

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Q. And the honoraria that you mentioned,
is that also related to asbestos?

A. No, not always. I gave a presentation at Harvard this summer on -- I have been concerned about this problem of double standards that some global corporations have where they don't protect the workers in the environment in some countries as they do in others from the same industrial processes and products, so I have been proposing that there be an investigation conducted of how the leading companies prevent the emergence of these double standards in their global operations because most of the big companies profess to not have double standards. At least they don't count that as a matter of corporate policy. The corporate policy says we will have uniformly high standards of protecting workers in the environment regardless of where we make and sell the same products.

So I have made presentations at the International Labor Office conference in Brazil

1 Q. When you say over 200, that is an
2 average of only about 10 a year, right?

3 A. Right.

4 Q. Do you think you have given deposition
5 testimony at roughly the same rate as trial
6 testimony over the past 20 years?

7 A. No. It varies, but the total is about
8 the same of trials and depositions, but the
9 proportions vary quite widely sometimes.

10 Q. How much did you earn testifying last
11 year, Doctor?

12 A. I don't know.

13 Q. How much did you earn the year before
14 that, 19 -- I'm sorry. How about the year 2000?

15 A. I think it was about 150,000, around in
16 there.

17 Q. What's the most money you have ever
18 made in a year testifying?

19 A. Between 150,000 and 200,000.

20 Q. Closer to \$200,000 would be the high
21 end?

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1 A. The high end might be 180 or so.
 2 Q. Do you think last year was the most
 3 money you have ever made testifying?
 4 A. It might have been. I don't know.
 5 Q. And I mean 2001.
 6 A. Right.
 7 Q. You are just not sure?
 8 A. I'm not sure.
 9 Q. You file tax returns, right?
 10 A. I file tax returns at the appropriate
 11 time.
 12 Q. So presumably by the time you file the
 13 tax return for last year, we will know the answer
 14 to that question?
 15 A. I will know more when I file my tax
 16 return.
 17 Q. During the course of your retention as
 18 an expert in the asbestos litigation you make an
 19 attempt to read all of the materials that are
 20 available that might be important to your
 21 opinions?

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1 A. I try to be prepared, but there isn't
 2 usually a great deal of reading that is called
 3 for at this stage. I mean, the book has been
 4 written. The research has been done for most of
 5 these companies, certainly for Owens-Illinois.
 6 There hasn't been anything new for at least five
 7 years since that book was written.
 8 Q. You are aware of a publication called
 9 the Asbestos Worker Magazine, right?
 10 A. Yes.
 11 Q. Have you reviewed that magazine for
 12 information about asbestos and health effects?
 13 A. I've seen some issues of the magazine.
 14 I haven't gone through every one.
 15 Q. Have you made any attempt to determine
 16 when information was published in that magazine
 17 about the health effects of asbestos?
 18 A. Well, I know that probably the first
 19 time was 1930. There was one issue in which what
 20 looks like a medical article was reproduced word
 21 by word and not really translated.

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1 Q. Have you made an attempt to determine
 2 what information is available in later editions
 3 of that publication about the health effects of
 4 asbestos exposure?
 5 A. I've seen some issues of the magazine,
 6 but I can't recall specifically dates and
 7 information as to particular times.
 8 Q. There's nothing about that in your
 9 book, right?
 10 A. I mentioned the 1930 one because of its
 11 vintage, but I don't go on and on about more
 12 recent things. I have things that happened after
 13 around 1970.
 14 Q. Do you have any reason to believe that
 15 the Asbestos Worker Magazine contained
 16 information about the health effects of asbestos
 17 prior to 1970?
 18 A. I think it may have. I don't recall.
 19 The things that I am usually shown from the union
 20 publications relate to these gatherings every
 21 five years in 1962 and '67 and '72 where I think

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1 Selikoff was present on at least some occasions
 2 and gave talks. As to the magazine, the Asbestos
 3 Worker Magazine itself, I don't recall specific
 4 issues. If you have them, I'd be happy to look
 5 at them and comment on them.
 6 Q. You don't discuss those 1960s and 1970s
 7 publications in your book, though, right?
 8 A. No, I don't.
 9 Q. You discuss in your book Dr. Selikoff's
 10 publications in 1965, right?
 11 A. Yes.
 12 Q. And there was a conference in 1964 at
 13 which the information that was in those
 14 publications was announced, right?
 15 A. Yes. There was a conference in 1964
 16 that was published in 1965.
 17 Q. Selikoff had been retained by the
 18 Asbestos Workers Union to do the studies that he
 19 did, right?
 20 A. I don't know about retained. He had
 21 gotten the corporation of the union to allow him

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to use some of their records. Some of their records, they had death cards for the deceased members of the union where Selikoff was able to know the names of the people and how long they had been in the union and when they started and when they died and where they lived at the time and was able to track down their death certificates more easily, so in some ways the collaboration with the union leadership was able to assist Selikoff in the performance of his research.

Q. You don't know one way or the other whether he was retained? Is that what you are testifying?

A. Retained is kind of a heavy word. If the law firm retained somebody or if a corporation retained somebody, I think I know what that means, but to say a union retained somebody, I can't recall having ever been paid by a union. I have done a lot of work with unions off and on over the years, but I have never been

1 A. I think they may have distributed one
2 of Selikoff's articles with one of the magazines,
3 but I'm not sure.

4 Q. You don't have any solid information
5 one way or the other about whether or not the
6 union leadership provided the results of
7 Dr. Selikoff's studies to the rank and file
8 membership, right?

9 A. I vaguely remember hearing something
10 about maybe the union distributed a copy of one
11 of Selikoff's articles or printed it and
12 circulated it to the union locals. I don't know
13 how widely that was circulated.

14 Q. Dr. Selikoff also made an attempt to
15 publicize his results to the rank and file
16 membership, right?

17 A. Well, he came to these meetings, these
18 every five-year meetings I was talking about, and
19 he would talk to some of the union chiefs. I
20 don't know the extent to which he was able to get
21 to talk to what you call the rank and file union

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paid for it, so that's why I was balking at the use of the word retained.

Q. Do you know if the union approached Dr. Selikoff and asked him to do the study?

A. I don't know. My guess is that Selikoff went to them, but I don't really know how the whole thing started.

Q. Dr. Selikoff's results were available to the union in 1965, right?

A. They were available to the union leadership, I'm sure.

Q. Do you have any reason to believe the union leadership kept them from the individual members?

A. No.

Q. Do you think the union leadership is part of the conspiracy of silence that you have opined about?

A. No.

Q. Do you know if the union leadership provided the information to its members?

1 membership.

2 Q. Is it fair to say, Doctor, that
3 Dr. Selikoff was trying to get the word out about
4 what his results demonstrated?

5 A. Yes.

6 Q. Dr. Selikoff is not, in your opinion,
7 part of the conspiracy of silence, right?

8 A. Definitely not.

9 Q. It's your belief that Dr. Selikoff did
10 all he could to try to get the word out to
11 workers about the health risks of asbestos,
12 right?

13 A. Well, I don't know that we could say
14 that, but I know that Selikoff was not shy about
15 giving newspaper interviews and working with
16 unions or at least working with this one union
17 and testifying at Congressional hearings and
18 doing other kinds of things, publishing.

19 Selikoff operated at many levels. He wasn't just
20 trying to reach people through newspaper
21 articles. He was starting medical journals and

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1 trying to transform the whole business of
 2 publishing articles on occupational and
 3 environmental health hazards with the creation of
 4 the American Journal of Industrial Medicine, the
 5 journal called Environmental Research, the
 6 creation of the Collegium Ramizini, the creation
 7 of the Society of Occupational and Environmental
 8 Health. Selikoff operated at many different
 9 levels. He was an extraordinary individual.
 10 Q. And you would agree with me at least
 11 that he was trying to communicate his findings to
 12 the membership of the Asbestos Workers Union?
 13 A. To the world in general, and some of
 14 that time was spent specifically dealing with the
 15 union membership. That is, in some way, but I
 16 don't know, you know, I don't know in complete
 17 detail exactly what he did.
 18 Q. But he did make a specific effort to
 19 communicate with the union membership, right?
 20 A. He was available to them if they called
 21 him. He was available to them at these five-year

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1 meetings.
 2 Q. He spoke at their conventions, right?
 3 A. Right.
 4 Q. As a matter of fact, the study had been
 5 done with information that had been collected
 6 from that union?
 7 A. Well, the raw material, right, it was
 8 based on studies of union members in New York and
 9 New Jersey at first.
 10 Q. Well, there was also a larger study,
 11 right?
 12 A. And the larger studies of the union
 13 membership and the broader areas of the United
 14 States, right.
 15 Q. Doctor, you mentioned you have some
 16 training in epidemiology, right?
 17 A. Yes.
 18 Q. You are aware of the Bradford-Hill
 19 criteria?
 20 A. Yes. I couldn't recite them by
 21 memory.

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1 Q. You would agree with me that those are
 2 criteria that are used as guidelines to determine
 3 when from an epidemiological perspective an event
 4 can be considered a cause of a disease, right?
 5 A. Well, they are criteria that are used
 6 in weighing the value of epidemiological data and
 7 assigning cause and effect, yes.
 8 Q. And consistency of results is one of
 9 those criteria?
 10 A. Yes. I believe so.
 11 Q. You would agree with me right that a
 12 case report is not the same as an epidemiological
 13 study, right?
 14 A. Right.
 15 Q. And that an epidemiological study
 16 carries a great deal more weight with regard --
 17 A. Not necessarily.
 18 Q. As a general principle, Doctor, do you
 19 agree with me that an epidemiological study
 20 carries a good deal more weight than a case
 21 report?

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1 MR. QUEENEY: Objection. Asked and
 2 answered.
 3 A. It is a very vague question. There are
 4 case reports that in the context in which they
 5 appear in terms of the medical and scientific
 6 literature that preceded them, that those case
 7 reports can establish a great deal, and there are
 8 epidemiological studies that may include large
 9 numbers of work instead of just garbage because
 10 they are not structured in a way that is going to
 11 produce any useful information.
 12 Q. Doctor, as a principle of epidemiology,
 13 would you agree with me that an epidemiological
 14 study carries more weight than a case report with
 15 regard to determining whether or not an event
 16 caused an effect?
 17 MR. QUEENEY: Objection. Asked and
 18 answered.
 19 A. I just don't understand the need for
 20 epidemiological studies when you are talking
 21 about cause-specific diseases like asbestosis and

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mesothelioma. You don't need epidemiological studies to establish cause and effect if you already know that these are diseases that are caused by particular agents and then you find that people who install vinyl flooring from sanding the vinyl flooring with the asbestos get mesothelioma. You don't need an epidemiological study when you get a case report or two of such individuals sustaining those kinds of health effects, and in that case report in the context of having already followed studies that clearly do establish that these diseases are caused by these agents and hardly, if ever, get anything else, it sets the stage for a case report to be very, very informative and important. And epidemiological studies, like I say, they are epidemiological studies that aren't worth the paper they are printed on.

Q. Doctor, you have changed my question a little bit. You are talking about diseases that are specifically associated with a particular

1 significant difference between an association
2 between an event and a disease and a conclusion
3 that the event caused the disease, right?

4 A. Well, there is a distinction made,
5 certainly.

6 Q. And that's because there can be an
7 association between an event and a disease that
8 could be related to other causal factors, right?

9 A. Right. If you studied emphysema among
10 coffee drinkers, you might find coffee drinkers
11 might have more emphysema than people who hardly
12 drink coffee at all, and that's because heavy
13 coffee drinkers smoke more cigarettes, and if you
14 haven't thought about studying or controlling for
15 that other factor, you will get an association
16 which makes no sense biologically maybe, and,
17 yet, you have this association.

18 Q. And that effect is the classic example
19 that is given in some epidemiological texts,
20 right?

21 A. It might well be.

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agent, right?

A. Right.

Q. I'd ask you not to make that
assumption.

A. If you are talking about something like
lung cancer, for example, which occurs in the
general population but which also occurs in
certain occupational groups more extensively,
then yes, usually certainly you would expect you
need group studies that are going to tell you
more than individual case reports of one or two
cases will tell you, that's right.

Q. And that would be true for any disease
that has more than one known cause, right?

A. Right.

Q. And it would be true for a disease for
which there are some suspected causes and then
also incidence of the disease that are
unexplained?

A. Right.

Q. In the field of epidemiology there is a

1 Q. And that would be referred to in
2 epidemiology as the existence of a confounding
3 effect, right?

4 A. Yes.

5 Q. And when studying epidemiology, it is
6 important to control for confounders in order to
7 draw any legitimate conclusions about causation,
8 right?

9 A. Well, in order to make the best study
10 you can, you try and control for confounding
11 variables. You try and structure the study so
12 that your exposed group and your control group
13 are identical as possible except for the one
14 element that you are trying to study.

15 Q. And the study that doesn't address or
16 control for confounders is, assuming equal
17 quality of both studies, not as valuable as the
18 study that does control for confounders, right?

19 A. These questions are so vague it is
20 almost hard to say. As a general rule, yes. You
21 try and control to the extent that you can. I

<p style="text-align: right;">Page 154</p> <p>1 mean, humans are not like experimental animals in 2 cages where you can totally control their 3 exposures and assure that you can test the 4 effects of one variable being changed, everything 5 else being equal, the same water, the same air, 6 the same food except that the one group of 7 animals has been exposed to some drug you are 8 testing or something like that. 9 Q. That is why epidemiology is a difficult 10 field, right? 11 A. It's complex. I mean, there are 12 limitations in experimental studies, there are 13 limitations in epidemiology, and in some 14 situations we probably can extract more useful 15 information from animal data than we can from the 16 available human data. 17 Q. It's difficult before a causal link is 18 established to figure out what events are causing 19 a particular disease, right? 20 MR. QUEENEY: Objection to the form. 21 Can I ask when you talk about causal link, are</p>	<p style="text-align: right;">Page 156</p> <p>1 MR. QUEENEY: Objection. No foundation 2 as to what you are talking about at all. What 3 century? What product? 4 A. We have reasons to suspect all kinds of 5 agents, and whether or not the studies will be 6 done is another story, and now we are finding 7 with this pesticide that I am interested in, 8 atrazine, that it causes gross deformities in the 9 sexual development of frogs exposed to levels, at 10 levels below the accepted, now accepted drinking 11 water approved levels by the EPA. There are a 12 lot of other pesticides that are out there that 13 are similar in structure to atrazine, and these 14 all ought to be tested with using the same kind 15 of model to see if they cause the same kind of 16 endocrine disruption in the reproductive 17 developmental problems that atrazine causes, so 18 it's not like there aren't a lot of things that 19 we have good reason to be concerned about that 20 should be studied. Whether they will or not in 21 this age of tight Governmental budgets and</p>
<p style="text-align: right;">Page 155</p> <p>1 you talking about cause or association? Because 2 you made that distinction. 3 MR. FISCHER: Right. 4 MR. QUEENEY: Is there a difference in 5 this question? 6 MR. FISCHER: I asked about cause. 7 MR. QUEENEY: Okay. Then you mean 8 cause. 9 A. Again, I'm sure there are differences 10 in the structure of the studies, and, sure, there 11 are limitations that you have in interpretation 12 of data depending on a lot of factors that go 13 into analyzing what weight to give to the study, 14 but Bradford-Hill said something else. 15 Bradford-Hill said doing nothing is also doing 16 something, and we don't have the luxury of time 17 to wait until all the T's are crossed and all the 18 I's are dotted before we take some action to 19 intervene where public health is in danger. 20 Q. It's not easy, Doctor, to identify what 21 future environmental risks exist, right?</p>	<p style="text-align: right;">Page 157</p> <p>1 reluctance of business interests to do research 2 that's going to destroy markets sooner rather 3 than wait for somebody else to do it later after 4 people start showing up with some of these 5 developmental abnormalities, I don't know, but 6 there are lots of things that need to be studied 7 and not nearly enough research that's being done 8 on things that we have very good cause for 9 concern about. 10 Q. The reason you say that these studies 11 need to be done, Doctor, is that we can't at this 12 point in time based on the knowledge available to 13 us determine whether or not these agents cause 14 these specific ailments, right? 15 A. Right. There are a lot of questions 16 that don't have answers. 17 Q. And before the studies are done, there 18 is simply not enough information to draw a causal 19 link, right? 20 MR. QUEENEY: Objection as to which 21 product. No context or background. Foundation.</p>

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1 A. In the context that we are talking
2 about with things like atrazine and related
3 pesticides, that's right. We can't do anything
4 to limit public exposure to these things from a
5 practical point of view. The inertia of the
6 present situation, that is, the sale and use of
7 these products, is going to go on as it has
8 unless and until necessary research is ultimately
9 done, and public health measures are based on
0 what findings come in.

1 Q. What kind of products contain
2 atrazine?

3 A. Atrazine is the most widely used
4 herbicide in the United States. It is used all
5 over the Midwest.

6 Q. It is used agriculturally?

7 A. It is used as a weed killer basically
8 along corn fields and soybeans. It is also used
9 on other crops but most extensively on those. It
0 is probably the cause of the so-called dead zone
1 in the Gulf of Mexico where the Mississippi River

1 for concluding that colon cancer is an asbestos
2 disease.

3 Q. You say, Doctor, that it has been
4 suspected for many years. Would you agree with
5 me that it is not been established that asbestos
6 exposure is a cause of colon cancer?

7 A. Not to this day you say?

8 Q. Right.

9 A. There are people that argue that it
10 hasn't been. There are others that say it has.
11 I believe the World Health Organization,
12 International Agency for Research on Cancer
13 concluded that colon or gastrointestinal cancer
14 was established as a consequence of occupational
15 asbestos exposure.

16 Q. Are you drawing a distinction between
17 as a consequence and cause?

18 A. No. That asbestos causes these
19 things.

20 Q. Do you have an opinion about that
21 personally?

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1 empties into the Gulf and has caused a lot of
2 defoliation of the flora that normally exist in
3 the water, and it also seems to be causing
4 prostate cancer in young workers in the plant
5 where they make this stuff.

6 Q. I want to ask you a little bit about
7 colon cancer.

8 Is it fair to say that you have not
9 reviewed the medical literature on colon cancer?

0 A. I haven't looked at it real closely.
1 Others would testify about that in this case as
2 to causation as we have already discussed.

3 Q. You don't plan on offering any
4 testimony specific to colon cancer, right?

5 A. Well, I could make comments on it, but
6 I think really the testimony on causation is
7 going to come through other people. I can
8 certainly say that colon cancer is something that
9 has been suspected as a cancer caused by asbestos
0 for quite a few years, and the Selikoff studies
1 appear to be the strongest epidemiological basis

1 A. Yes. I think it does cause
2 gastrointestinal cancer. Again, I am concerned
3 that more wasn't done eliminating asbestos from
4 the diet.

5 Q. Are you aware of studies that have been
6 done regarding ingestion of asbestos and whether
7 or not colon cancer results?

8 A. I know there have been some
9 experimental studies, and for the most part they
10 have produced negative findings.

11 Q. You are referring to animal studies?

12 A. Yes.

13 Q. Are you familiar with any studies
14 involving humans who have ingested asbestos?

15 A. I know there have been some
16 epidemiological studies, but you run into all
17 kinds of problems with those trying to look at
18 the census tracks in California where there was
19 asbestos in the surface waters and trying to see
20 if there's some kind of an association, and the
21 last of such publications was a guy named

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1 Conforti in 1983.

2 Q. Are you aware that those studies showed

3 that there did not appear to be a causal

4 relationship between asbestos ingestion and colon

5 cancer?

6 A. There were other cancers that they did

7 find associated, but I don't think they find an

8 excess of colon cancer to be associated.

9 Q. What about rectal cancer?

10 A. I don't remember.

11 Q. Are you familiar with any study that

12 there is an increased incidence of rectal cancer

13 among asbestos-exposed individuals?

14 A. Again, I think the Selikoff studies

15 did. Mancuso talked about it in a conference in

16 New York in 1964 in a discussion around page 590

17 or so. He talks about several, I think three or

18 four cases of colon cancer that he had seen in an

19 asbestos factory workforce in Ohio.

20 Q. Would it be fair to say, Doctor, that

21 you have not done a comprehensive review of the

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1 literature with regard to whether or not asbestos

2 exposure causes colorectal cancer?

3 A. That's right, I haven't done the

4 detailed review of all of that.

5 Q. Are you satisfied that the first time

6 anyone suggested that asbestos exposure could

7 cause GI cancer was Dr. Selikoff in 1964?

8 A. Well, I think that maybe Selikoff was

9 finding an excess of these cancers in his first

10 report in insulators in 1964 in his mortality

11 study.

12 Q. That's the first time that it had ever

13 been published, as far as you know, right?

14 MR. QUEENEY: The suggestion again or

15 are we talking about the results of an

16 epidemiological study?

17 MR. FISCHER: The suggestion.

18 A. I think so. I believe that's right.

19 Q. You are familiar with the working group

20 on asbestos and cancer that was operating in

21 1965?

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1 A. The group that published at the end of

2 the conference proceedings, yes.

3 Q. It would have been Dr. Mancuso and

4 Dr. Wagner?

5 A. Yes.

6 Q. You indicate in your book that the

7 delegates to that working group would have

8 included a virtual who's who in the science of

9 health effects?

10 A. Yes.

11 Q. You would agree with me that the

12 working group concluded that lung cancer and

13 mesothelioma were tumors that had been shown to

14 be associated with exposure to asbestos dust?

15 A. Right.

16 Q. But that with regard to GI cancer, they

17 said there is some suggestion of an association

18 also with gastrointestinal carcinoma?

19 A. I think that's right.

20 Q. They didn't say that it was a tumor

21 that had been shown to be associated, right?

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1 A. Right. The evidence was more limited.

2 Q. And you quote that at page 127 of your

3 book, right?

4 A. Yes. Yes, I do.

5 Q. You would agree with me that

6 Dr. Mancuso wasn't in any way influenced by

7 corporations that were manufacturing

8 asbestos-containing products?

9 A. He wasn't working for them, that's

10 correct.

11 Q. And the same goes for Dr. Wagner?

12 A. That's another story.

13 Q. In 1965 the same goes for Dr. Wagner,

14 right?

15 A. I suppose it did in 1965.

16 Q. In your report, Doctor, that we have

17 marked as Exhibit Number 1, I'd like to direct

18 your attention to page 8.

19 A. Yes.

20 Q. Do you see the heading "Other Forms of

21 Cancer Caused by Asbestos Exposure"?

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1 A. Yes.

2 Q. That section, did that appear in the
3 version of your report that you sent to
4 Mr. Queeney?

5 A. I don't think that it did. I think
6 that this is something that Mr. Queeney asked me
7 to comment on in this particular case, in
8 Mr. Jacques' case.

9 Q. And that would have been something that
10 Mr. Queeney then added to the report and sent
11 back to you for your approval, right?

12 A. No, no. I wrote it. He asked me to
13 say something about it, and I wrote this.

14 Q. My understanding, Doctor, was that you
15 had sent Mr. Queeney a copy of a report from some
16 previous case.

17 A. Right.

18 Q. And that he edited it and sent it back,
19 right?

20 A. Well, right. I may have said that. As
21 I look at this particular part, I think that this

1 cancer of the gastrointestinal tract has been
2 demonstrated in such groups as asbestos
3 insulators, right?

4 A. Right.

5 Q. And the quoted portion of that sentence
6 is just an excess risk of cancer of the
7 gastrointestinal tract that has been
8 demonstrated, right?

9 A. Right.

10 Q. That sentence does not provide that it
11 has been established that exposure to asbestos
12 causes gastrointestinal cancer, right?

13 A. I think you can read it to say that
14 asbestos causes gastrointestinal cancer. I don't
15 think that a sentence like that in a context like
16 that could be read any other way unless they had
17 some kind of a disclaimer sort of phrase in there
18 saying well, we see that this is an association
19 but we don't think it is proving a case of cause
20 and effect. Taken into context, that appears
21 that is a strong statement that cause and effect

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1 is the only part that was actually added in this
2 case, and it was added after consultation with
3 Mr. Queeney, and he said look, you know, I'd like
4 you to say something about colorectal cancer, and
5 I said sure, I can put in a paragraph on that.

6 Q. To your knowledge, Doctor, is it
7 legitimate to refer to colorectal cancer as one
8 disease rather than separate them between colon
9 cancer and rectal cancer?

10 A. I don't know. That's really for the
11 doctors to deal with. It depends on the
12 context. You might have epidemiological data
13 that's gathered in a way that makes it more
14 sensible to group them together because of the
15 underlying reporting system you are relying on to
16 do your study, and in other cases it might not.
17 I don't think that is a kind of question that can
18 be answered with all one answer for all uses.

19 Q. In your report, Doctor, you say that
20 the conclusion of the International Agency for
21 Research on Cancer was that an excess risk of

1 has been established.

2 Q. You have only given us a very small
3 snippet of a quotation there, right?

4 A. I have reduced it to report summary
5 form, but I'm sure that -- you know, I was
6 looking at the page from which that came when I
7 composed this paragraph, and I'm sure if you
8 looked at the original source, you'd find that I
9 was being fair and true in reporting what it
10 says.

11 Q. That was going to be my question,
12 Doctor. You were satisfied that in 1977 the IARC
13 had concluded that there was a causal link? Let
14 me end the question there.

15 A. Right. That's the way I read it.

16 MR. FISCHER: Mark that as 3, please.

17 (Whereupon, Castleman Deposition
18 Exhibit No. 3, Curriculum Vitae of Castleman,
19 marked.)

20 BY MR. FISCHER:

21 Q. Doctor, if you would take a look at

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1 what we have marked as Exhibit Number 3. Is that
2 a copy of your most recent curriculum vitae?

3 A. Yes, it is.

4 Q. Anything to add to that?

5 A. No. You got a current one.

6 Q. Pardon?

7 A. You have a current one.

8 Q. Thank you.

9 Your book, Asbestos: Medical and Legal
10 Aspects, is in its Fourth Edition, right?

11 A. Yes.

12 Q. Are there any plans for a fifth
13 edition?

14 A. No.

15 Q. Have you done any additional research
16 on the subject matters that are contained in the
17 book since the Fourth Edition was published?

18 A. No. I accumulate things in files on
19 particular companies. I accumulate files on new
20 companies. That kind of work goes on, but there
21 is no plan at this time to revise the book again.

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1 Q. Would it be fair to say that whatever
2 new information you have collected since the
3 publication of the Fourth Edition doesn't warrant
4 at this point in time a publication of a new
5 edition?

6 A. Right. It is partly a matter of my
7 time, but there is, of course, also very much a
8 matter of the quantum of information that would
9 be added, and I don't feel that the added
10 information is sufficient.

11 Q. You still, Doctor, on occasion will do
12 research for plaintiffs' lawyers, right?

13 A. Well, I will do research. If I find it
14 interesting and worthwhile, I will do it, yes,
15 plaintiffs' lawyers or others.

16 Q. Recently you had come across some new
17 documentation with regard to Willis Hazard; is
18 that right?

19 A. What do you mean?

20 Q. Some documentation addressing the
21 question of whether or not Mr. Hazard was suited

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1 to have a wartime position in the Jersey Health
2 Department, do you recall that?

3 A. Oh, yes. That was in the context of I
4 was really interested in metropolitan life, but
5 it had to do with Hazard's service in the State
6 of New Jersey during World War II, and there was
7 at first an interest in looking at whether there
8 was a health problem at the Johns-Manville plant
9 in Manville, New Jersey, and according to a
10 Metropolitan Life report, Met Life's people
11 discouraged I guess it was Hazard as the New
12 Jersey health chief, occupational health chief
13 from doing any investigations saying something to
14 the effect that they checked that plant out and
15 it was okay.

16 Q. And I didn't mean to give you a pop
17 quiz about that, Doctor. I know you have
18 testified about it before. My question is
19 whether or not you have done any new research or
20 seen any new documents about it since the last
21 time you testified about it?

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1 A. No, no. I haven't looked into that for
2 years.

3 Q. You stand by your testimony at that
4 time, right?

5 A. Yes.

6 Q. Are you working on any new projects in
7 relation to conspiracy theories?

8 A. No.

9 Q. I understand you have testified in
10 Bloomington, Illinois a few times, right?

11 A. Yes.

12 Q. Mr. Queeney referred you to some
13 testimony you had given in a Bloomington case a
14 little earlier, right?

15 A. Yes.

16 Q. That testimony has always been for Jim
17 Walker and Jim Wilder?

18 A. It has always been at the request of
19 that law firm, yes.

20 Q. You have been down there a couple times
21 even within the last few months, right?

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1 A. I have been down there once. I guess
2 it was a couple of times within the last five or
3 six months.

4 Q. You understand, Doctor, that when you
5 have testified in Bloomington recently that you
6 have been prohibited from offering any opinion
7 about whether or not a conspiracy existed?

8 A. I don't remember that. I generally --
9 I have sometimes been a little bit averse to the
0 use of the C word simply because it is a legal
1 term that has different meanings in different
2 states, and generally what I do is testify about
3 the evidence of concerted action and related
4 things, and then it's up to the jury, following
5 the instructions of a judge, to decide whether or
6 not any claims of conspiracy are fulfilled or
7 not. I am not averse to using the word
8 generally, but in some cases I prefer not to
9 answer the ultimate question and just say that's
0 a legal question, let the jury decide.

1 Q. When you testify, Doctor, you typically

1 offered the opinion before the jury that there
2 was a conspiracy or concerted action?
3 A. Well, I can't say that I recall having
4 offered a specific opinion on that point, but I
5 can't really remember being forbidden to.
6 Probably the plaintiffs' lawyers, they know what
7 the rules are, and if the judge had said that
8 this witness is not to be asked the ultimate
9 question, they don't ask it, so maybe they tell
10 me about that, and maybe they don't. Maybe I
11 just walk in, they ask me whatever questions they
12 want to ask me, I answer the questions, we go
13 through cross-examination and I get on a plane
14 and I never knew that the judge said don't ask
15 him the ultimate question because they never
16 bothered to tell me or go through any of the
17 rigmarole in the actual courtroom over it because
18 it had already been sorted out before I arrived.

19 MR. QUEENEY: Can I ask a question?
20 Can you tell him which case you are talking
21 about, if you know? If he has been there three

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1 speak to the lawyer that is putting you on and
2 get some instructions about any limitations that
3 might be put on your testimony, right?

4 A. Your question is complicated, but, of
5 course, it will be told to me. If there are
6 limitations on what I can say, that will be
7 explained to me sometimes by the judge as well as
8 the plaintiff's lawyer outside the presence of
9 the jury before the jury comes back in and the
0 case resumes.

1 Q. And do you have a recollection of being
2 told by either Mr. Walker or Mr. Wilder that your
3 testimony in Bloomington had been limited such
4 that you were not to express an opinion about
5 whether or not there had been a conspiracy or
6 concerted action or any of the synonyms that you
7 might use for those terms?

8 A. I just don't remember.

9 Q. Is it fair to say, Doctor, that when
0 you have been down in Bloomington over the past
1 two or three years testifying that you have not

1 times in this one case that you are thinking
2 about, maybe he can give you a better answer.
3 MR. FISCHER: I think we are doing just
4 fine.

5 Q. Doctor, it would be fair to say that
6 with regard to the opinions that are expressed in
7 Exhibit 2, that those are opinions you have not
8 offered in Bloomington for at least three years?

9 A. Well, I can't recall. I mean,
10 certainly this particular language here is
11 something that was structured for this case by
12 Mr. Queeney, and I don't recall the terms
13 "substantially assisted" and "encouraged", for
14 example, being used in other testimony, but
15 again, these are -- you know, there are a lot of
16 ways to skin a cat. There are a lot of ways to
17 ask a witness what you need in order to establish
18 whatever it is you are trying to establish
19 through the presentation of evidence, and I don't
20 claim to be a law scholar about what I am used
21 for when I testify as an expert witness.

<p style="text-align: right;">Page 178</p> <p>1 Q. Earlier, Doctor, you mentioned that 2 what's known about Owens-Illinois has been known 3 for 15 years, right? 4 A. I think so. Aside from the contents of 5 their library which I think I heard about in 1993 6 or so, I don't think I have come across anything 7 new in 15 years or more. 8 Q. It's fair to say that you haven't done 9 any additional investigation of Owens-Illinois in 10 the past five years? 11 A. That's right. 12 Q. Would it be fair to say you have never 13 researched Owens-Illinois at all except for its 14 connection with the Kaylo product? 15 MR. QUEENEY: Objection as to form, 16 what that means. 17 A. I think that's basically true. My 18 interest in Owens-Illinois has been limited to 19 the fact that they were a producer of a widely 20 used asbestos product, and so my investigations 21 of the company have been in one way or another</p>	<p style="text-align: right;">Page 180</p> <p>1 because they made competitive non-asbestos 2 products. 3 Q. And that would be the fiberglass 4 products, right? 5 A. Right. 6 Q. So would it be fair to say that your 7 interest in Owens-Corning has been limited to 8 their connection to Kaylo, their fiberglass 9 products and the other asbestos-containing 10 products they may have manufactured? 11 A. Yes. I think that about covers it. 12 Q. Did you ever study what percentage of 13 Owens-Corning's business was represented by their 14 Kaylo business? 15 A. No. 16 Q. Would it be fair to say, Doctor, that 17 you have never seen an Owens-Illinois document 18 dated after 1958? 19 A. I think that's right. 20 Q. We talked a little bit earlier about 21 referring to Kaylo as nontoxic, right?</p>
<p style="text-align: right;">Page 179</p> <p>1 connected to that. 2 Q. Did you ever make any attempt to 3 investigate what proportion of Owens-Illinois' 4 business was represented by the Kaylo division? 5 A. No. 6 Q. Have you ever studied Owens-Corning in 7 any way that was unrelated to its manufacture and 8 sale of Kaylo? 9 A. Well, I have been interested in other 10 products they made. Some of their fiberglass 11 patents are mentioned in Mr. Berger's table, in 12 Mr. Berger's Chapter 6 in my book, been 13 interested in other asbestos products that 14 Owens-Corning made. They made insulating cements 15 in the 1940s, and this came to my attention when 16 I saw that they had done an industrial hygiene 17 analysis of a place where they were doing that 18 and found pretty high levels of asbestos dust, so 19 just in answer to your question, my interest in 20 Owens-Corning has gone beyond the product Kaylo 21 because they made other asbestos products and</p>	<p style="text-align: right;">Page 181</p> <p>1 A. Right. 2 Q. And you have reviewed what you believe 3 to be the important literature about the 4 reference to Kaylo as nontoxic? 5 A. Yes. 6 Q. And you have reviewed the literature 7 that you believe to be important about describing 8 asbestos as nontoxic, right? 9 A. Well, there might be one article that 10 fits that description. 11 Q. What article are you thinking of? 12 A. I think there was one article that 13 Schepers wrote where he quibbled about whether 14 asbestos was toxic given that it was carcinogenic 15 and fibrogenic. He wasn't sure that toxic was 16 the right word to use. 17 Q. When was that article published? 18 A. I think that was in the mid-'60s. 19 Q. Do you agree that toxic can have 20 differing meanings depending on the context? 21 A. Slightly different.</p>

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Q. And you'd agree that Schepers, at least in the 1960s, was questioning whether or not toxic was an appropriate term to describe asbestos, right?

A. Well, yes. He was writing in the context of someone steeped in professional jargon of toxic substances and all the ways in which harmfulness of such materials can be subdivided into the different types of effects that they cause.

Q. You are aware of the threshold limit values that were published in the 1940s and '50s and '60s?

A. Yes.

Q. You are aware that asbestos was listed as a mineral dust on those TLVs, right?

A. The TLVs were very inconsistent in the way they originally grouped these things, and they don't group them this way anymore, but in their early publications they would group some things by the type of effect and other things by

information available regarding how the TLVs were set and monitored?

A. Set and monitored?

Q. Yes.

A. I have been interested in how they were set. There is darn little available on how they were monitored. I often regard them as speed limits without tickets.

Q. You are aware that the ACGIH had a Threshold Limit Value Committee?

A. Yes.

Q. And that the committee annually considered whether or not the TLVs should be modified?

A. Well, they basically got together once a year or twice a year at the most, and mainly they would add new substances to the list.

Q. You are aware that they met at least annually and the purpose of the meeting was to determine whether or not the TLVs should be modified, right?

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their origin which didn't have any consistency at all.

Q. It is true --

A. The example you have given is one.

Q. It's true, Doctor, that the TLVs listed asbestos as a mineral dust, right?

A. Right. It was listed under that heading.

Q. And there was a separate heading for toxic dusts, right?

A. Right, but mostly these industrial hygienists would come up with this scheme in the first place. There wasn't a single doctor in the original TLV Committee. There wasn't a single physician.

Q. In your report that we have marked as Exhibit Number 1 on page 8 you have a paragraph, actually a couple paragraphs, page 8 and 9, several paragraphs on the TLVs, right?

A. Yes.

Q. Have you made it a point to investigate

A. Right. I mean, basically they were there to add substances to the list. Every once in a blue moon they would actually reconsider whether a substance already listed needed to have its exposure limit changed, but for the most part they were focused on adding new substances to the list of substances for which exposure limits were given.

Q. You weren't present at any of these meetings, right?

A. I was only present at one.

Q. And when was that?

A. 1988.

Q. When you say that the meetings were generally designed to add new substances to the list, are you speaking of any particular time period of meetings?

A. I am speaking of a period of the 1940s, '50s and '60s and '70s. I don't think it changed as much in the '80s.

Q. Have you heard of a gentleman named

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1 Dohrman Byers?

2 A. The name rings a bell. He was an
3 industrial hygienist I guess in the '60s
4 somewhere in the Midwest, I think.

5 Q. Do you know if he sat on the Threshold
6 Limit Value Committee of the ACGIH?

7 A. I don't think he did.

8 Q. Do you know if he has ever given sworn
9 testimony?

10 A. I don't know.

11 Q. Doctor, I would like you to assume that
12 he did sit on that committee for at least one
13 year in the 1950s and that he has given sworn
14 testimony about what the committee did.

15 Is that testimony that you would
16 consider to be important for the purposes of your
17 opinions?

18 A. I would be interested in seeing it if
19 you could provide that to me. I haven't read any
20 transcripts of such testimony by him. And you
21 say he was on the committee for one year?

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1 Q. That's right.

2 A. I don't recall him being listed in the
3 references I have consulted, but if he was just
4 listed for one year, it could have escaped my
5 attention.

6 Q. That would be an example of one of the
7 documents that hadn't made its way to you,
8 right?

9 A. Right. Well, when you start talking
10 about documents of this kind, you are not talking
11 about published literature. You are talking
12 about stuff that is exclusively available through
13 litigation and a community of people that share
14 these documents. I'd love to see the deposition
15 of Mr. Byers.

16 Q. What's the basis for your testimony,
17 Doctor, that in the '40s and '50s the TLV
18 Committee was meeting essentially just to add new
19 substances?

20 A. Because they hardly ever changed the
21 limits that they already had on the list.

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1 Q. That doesn't mean that they weren't
2 evaluating the limits, though, does it?

3 A. I mean, that doesn't in itself
4 establish that fact, no, but I have looked for
5 documentation on the minutes of the TLV
6 Committee. I've gotten ahold of the minutes
7 going back to around 1967 or so. I have talked
8 to people who were on the committee. I have
9 called up people who were on the committee in the
10 '60s and '70s and asked them what went on. I
11 have gone to the ACGIH to see what files they had
12 on the history of all this. I have looked every
13 place I could to find documentation on this.
14 This is an area of very detailed and serious
15 investigation for me from around 1986 to around
16 1993, and the conclusions I have drawn is that
17 the committee wasn't really doing very much to
18 actually re-evaluate or re-examine the exposure
19 limits they already had.

20 In 1953 they defined what they meant by
21 TLVs for the first time, and they said these are

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1 eight-hour time-weighted average exposure
2 limits. They never said that before. They
3 didn't re-evaluate any of the several hundred
4 probably substances they had on that list before
5 they did that. They just published that preface
6 and definition without any reconsideration of the
7 substances on the list. That was in '53.

8 Then I published my article, Corporate
9 Influence on Threshold Limit Values. They took a
10 lot of heat for the way, the sloppy job that they
11 had been doing and led financially. Parties
12 influenced the development of the TLVs, and they
13 decided to revise the TLV documentation, so they
14 went, and they took all of these references they
15 had, things like Dow Chemical 1973, unpublished,
16 and they took out all that stuff, and they bulked
17 it up with more published references, but they
18 didn't change any of the exposure limits on all
19 those substances that they were putting in
20 documentation for.

21 There was one substance that one guy on

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the committee actually complained. He said we really need to re-evaluate this one, and they didn't want to open the can of worms saying if we start doing this for ethylene oxide, we have to do it for more of them, and it is hard enough to go through revising the documentation without reopening the whole question of whether these exposure limits are actually justified, and, of course, my central criticism had been the limits weren't justified based on what they had before, and by fancying up the documentation, all they were doing was covering up corporate influence rather than weeding it out.

Q. What was the time period on this ethylene oxide situation?

A. Ethylene oxide. That must have been around 1990, '91 when they were doing an extensive rewrite of the documentation.

Q. And this move from referring to unpublished documents to referring to published studies, when did that happen?

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A. Well, I think it was 1991 when they published the issue of the -- with the 1986 TLV documentation that I went through and I found that over a hundred of the 600 or so substances in the list had a critical reference in there, that was an unpublished corporate communication, and once I put that out, then they decided they were going to clean up the documentation when they republished it, so it was the next time around, and I think that was 1991.

Q. Would it be fair to say, Doctor, that you don't have any information one way or the other about what was discussed by the TLV Committee in the 1940s?

A. Right. There's no surviving minutes I have ever seen, and the people I have talked to, I never talked to people that were involved with it in the 1940s. I don't know if Harvey Elkins went back that far, but in any case, if they were, they didn't remember anything that far back that was of any value, so all you can go by is

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1 the documentary record that I have been able to
2 find, and, as I say, I would be very interested
3 in this deposition of this old industrial
4 hygienist you are talking about.

5 Q. Would it also be fair to say, Doctor,
6 that you have no information one way or the other
7 about what was discussed by the TLV Committee
8 during the decade of the 1950s?

9 A. No. I can only look at the documentary
10 record of what they produced in terms of the
11 TLVs. There may have been some correspondence I
12 found. One of the things that I did was go to
13 the U.S. Government office where the chairman of
14 the TLV Committee for many years worked, and his
15 pay stub was with the Federal Government, and he
16 accumulated a substantial amount of file material
17 that was still in the possession of the
18 Government when I decided to do this
19 investigation, so one of the things I did was go
20 to Cincinnati and look at the files of
21 Dr. Stokinger, S-T-O-K-I-N-G-E-R, but there are

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1 few documents I got that may have dated from the
2 1950s relating to correspondence with companies
3 about one TLV or another.

4 Q. Is it fair to say, Doctor, that at
5 least with regard to what the TLV Committee was
6 doing in the '40s and '50s, that you don't have
7 an opinion one way or the other about whether or
8 not they were putting forth a good faith effort
9 to announce a threshold limit value that was
10 consistent with their definition of that term?

11 A. Well, I mean, this question is really
12 vague. Good faith is fine, but good faith
13 doesn't protect people. Good information helps a
14 lot more than good faith, and these were people
15 who were not really reviewing all the medical and
16 scientific literature that was available at the
17 time that they were publishing these limits. The
18 original limits that they published seemed to
19 have been assembled from lists of Government
20 lists of exposure limits that had been developed
21 in some of the more advanced states like Oregon

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1 and California, New York, and so they'd go
 2 through these lists of exposure limits and kind
 3 of assemble some kind of a composite list of
 4 limits for a hundred or 150 chemicals, and that
 5 was how they started, was almost by taking stuff
 6 from these, by being a secondary reference, if
 7 you will, for places where somebody already had
 8 done the work of picking a number, and then they
 9 started doing it themselves. They'd sit around
 10 the table and play God and pick numbers sometimes
 11 setting occupational exposure limits for
 12 pesticides based on lethal dose exposure tests in
 13 rats where they had absolutely no chronic
 14 toxicity information at all about the stuff but
 15 just on the basis of whether acute exposure to
 16 this one was worse than acute exposure to that
 17 one and would kill you right away if you were
 18 exposed to enough of it, and they would set human
 19 exposure limits for lifetime exposure 40 hours a
 20 week with absolutely no additional information
 21 except how much it took in the air to cause death

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1 to 50 percent of the rats that were exposed to it
 2 within one week of their exposure.
 3 Q. Dr. Castleman, do you have any evidence
 4 to suggest that the people who were on that TLV
 5 Committee in the '40s and '50s were not dedicated
 6 to worker health?
 7 MR. QUEENEY: Objection to the term
 8 "dedicated to worker health".
 9 A. Yeah, that's a real vague term. Some
 10 of these were Government bureaucrats, with all
 11 respect for the Government, were not always, you
 12 know, the people that I would feel real
 13 comfortable with. Some of the old public health
 14 crowd was much closer to business interests and
 15 industry than people that came along in the
 16 1970s. That's just maybe because the times were
 17 like that, that they didn't really have any power
 18 or influence or laboratories or laws to make
 19 these companies behave, and the only ways that
 20 they could try and get them to do anything was by
 21 persuasion. You go in and you do an industrial

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1 hygiene survey, say you ought to do something
 2 about all the unguarded belts and machinery
 3 people could get their arms caught in and maybe
 4 try and talk some businessman into spending a
 5 couple hundred dollars on some sheet metal, but
 6 they didn't have a whole lot of -- well, it was a
 7 different era is what I am trying to describe,
 8 and so the people from that era who were setting
 9 these exposure limits, they might sit on the TLV
 10 Committee one week, and the next week they'd be
 11 back in Ohio dealing with factories that were
 12 using the same substances, and it must have
 13 crossed their minds that if they set an exposure
 14 for lead dust that was lower than the levels
 15 prevailing in the lead smelter down the road from
 16 their Government office, that they would be
 17 setting up a kind of a contradiction that might
 18 have serious problems both for them and the local
 19 company. Surely they were often mindful of that,
 20 and I think that the TLVs reflected the times,
 21 reflected the attitudes. It's kind of a complex

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1 thing. They might have been in a sense public
 2 servants and not in any way corrupt but still
 3 people who were not pushing real hard and maybe
 4 not terribly knowledgeable about the hazards that
 5 they were sitting around this table writing
 6 exposure limits for.
 7 Q. Let's do it that way. Let's use your
 8 words. Is it fair to say that you don't have any
 9 information that the people who sat on the TLV
 10 Committee in the '40s and '50s were corrupt?
 11 A. Right. I don't. I mean, a few of them
 12 were corporate consultants like Vorwald, like
 13 Drinker, like Paul Groce later on, but most of
 14 them, their regular jobs, the day-to-day jobs
 15 were as Government officials, not as corporate
 16 consultants. Some of them were academics who did
 17 a lot of corporate consulting, some who didn't.
 18 Q. Just being a corporate consultant
 19 doesn't make a person corrupt, does it?
 20 A. No.
 21 Q. You agree with me or not?

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1 A. Oh, I agree with you that that doesn't
2 in and of itself establish that someone is
3 corrupt.

4 Q. You don't have any information or
5 evidence that the TLV for asbestos during the
6 '40s and '50s was subject to any unscientific
7 influences?

8 A. Look, it was basically a case of
9 neglect just like all the other TLVs. They had
10 some older exposure limit that had been
11 recommended back in the 1930s by some guy in the
12 public health service or the California
13 Government or by somebody else, and they adopted
14 this number, and they never gave it another
15 thought, and then they went on to put some other
16 substances on the TLV list. It was not something
17 that these people devoted a tremendous amount of
18 time and attention to. They had dozens and
19 dozens of substances. You know, industry was
20 introducing hundreds of new materials on a large
21 scale in this country every year back in those

1 asbestos during the '40s and '50s was not subject
2 to any improper or corrupting influences that you
3 know of?

4 MR. QUEENEY: Objection to the term
5 "improper". You need to define that.

6 A. Right. I mean, it's a case of --

7 Q. It is a case of neglect, as you say?

8 A. More a case of neglect more than
9 anything else. It is like trying to determine
10 the difference between incompetence and mendacity
11 from the results of something. Sometimes it's
12 not easy.

13 Why don't we take a break.

14 Q. Okay.

15 (Recess taken -- 3:03 p.m.)

16 (After recess -- 3:05 p.m.)

17 BY MR. FISCHER:

18 Q. Dr. Castleman, can we agree that
19 responsible industrial hygienists were relying on
20 the TLVs in the 1950s?

21 A. I suppose a few of them were.

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1 days, and the TLV Committee, maybe they would be
2 adding 10 or 15 substances to the list, 20
3 substances to the list each year.

4 Q. Doctor, would it be fair to say that
5 with regard to your conclusion that the TLV
6 Committee never gave a TLV another thought after
7 it was established, that you don't have any
8 information or evidence that demonstrates that
9 that's true for the 1940s and '50s?

10 A. I mean, I am using that as a kind of
11 figure of speech. Obviously there are a few TLVs
12 like benzene that did get lowered on some
13 occasions, but that is the exception, not the
14 rule. My information is based on looking at what
15 they did because there really isn't much else
16 unless you are lucky enough to come up with an
17 occasional deposition transcript or contributed
18 article, but that would be published, and I have
19 looked at everything that has been published on
20 this, I think.

21 Q. Can we agree, Doctor, that the TLV for

1 Q. You mentioned earlier the Saranac Lab,
2 industrial hygiene services for Owens-Illinois,
3 right?

4 A. Yes.

5 Q. You are aware that Saranac directed
6 Owens-Illinois to the TLVs as safe levels of
7 exposure, right?

8 MR. QUEENEY: Objection.

9 A. No. They put it a little differently.
10 Dr. Vorwald said you can't rely on the TLVs as
11 being complete protection from health hazards.
12 Where did he say that? It was in the report on
13 the Kaylo division plant which I referenced on
14 page 596. Probably it is in Chapter 4. Yes. It
15 is referenced with a quote. I even remember the
16 page number. It is on page 9 in the original
17 report which I'm sure you have, but let me see if
18 I can find the quote. Yes. It is on 317 where
19 Vorwald is writing about the reliability of the
20 TLVs for asbestos and silica, writing about his
21 industrial hygiene survey at the Sayreville plant

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1 in New Jersey to the people at Owens-Illinois,
2 and the quote says "the maintenance of the
3 working environment in a condition which conforms
4 to regulations promulgated by local health
5 agencies or which is in accord with accepted
6 standards of the practice should not be
7 considered as a complete protection for a worker
8 from acquiring a disease as the result of his
9 occupation." So I think that's a very clear
10 warning not to consider the TLVs safe.

11 Q. Saranac still referred, though, to the
12 TLVs, right?

13 A. They also listed them as a basis for
14 comparison in the same report, yes.

15 Q. And the clear suggestion there is that
16 when you are setting up your industrial hygiene
17 program and obtaining your industrial hygiene
18 program, you should make sure that exposures are
19 at lowest levels?

20 A. Well, you should make sure exposures
21 are not above the levels. It doesn't mean that

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1 the levels are safe. It means above they are
2 definitely hazardous.

3 Q. I want to ask you a little bit about
4 the state of knowledge in 1983. By 1983 you had
5 already begun testifying, right?

6 A. Yes.

7 Q. You agree with me that by 1983 it was
8 common knowledge that asbestos could be a human
9 carcinogen?

10 MR. QUEENEY: Object to the question
11 only in the sense that you don't define the
12 universe of whose knowledge.

13 A. I mean, it was widely known that
14 asbestos could cause cancer and that it was a
15 dangerous material.

16 Q. It was certainly widely known in the
17 medical community?

18 A. Yes.

19 Q. It was certainly known, widely known in
20 the community of asbestos workers?

21 A. I don't know how widely known it was

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1 among the workers. To go back 10 years before
2 that, back in the early '70s, I used to hitchhike
3 a lot, and I would take my vacations by
4 hitchhiking across the country, and one of those
5 years I decided to raise the question with people
6 who would pick me up -- you'd get long rides with
7 people -- and after about an hour or so somehow
8 the subject of asbestos would work its way into
9 the conversation just to see if the person that I
10 was riding with knew what asbestos was and
11 whether that person, if they knew what it was,
12 did they know it was harmful, and I was really
13 quite surprised because I had been, by 1973 I had
14 been getting lots of calls from newspapers and
15 other media outlets, and I was seeing all these
16 stories that were coming out in the media. I was
17 working and living in Washington, and I got the
18 sense that the word was out. I'd get rides with
19 these people that didn't know anything about
20 asbestos. They didn't even know what it was, and
21 the ones that knew what it was, most of them

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1 didn't know it was dangerous, and years later
2 documents surfaced in the asbestos litigation,
3 and sure enough, the asbestos industry had
4 conducted its own surveys at around the same
5 time, and they did a survey, and they found that
6 only 22 percent of all Americans were aware that
7 asbestos was hazardous to health.

8 Q. What year was that?

9 A. This was 1973. And this is based on a
10 survey that the Asbestos Information Association
11 had done, and this was presented at a meeting of
12 the Asbestos Information Association and the
13 Asbestos Textile Institute, and in the words of
14 the guy presenting it, this was the good news.

15 Q. What page are you referring to there?

16 A. 818.

17 Q. Doctor, by 1983 asbestos-containing
18 insulation products had been replaced with
19 non-asbestos-containing products, right, in the
20 United States?

21 A. Most of them. The pipe covering and

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1 block thermal insulation were no longer made with
2 asbestos by that time in the U.S.

3 Q. And we mentioned earlier that on the
4 Johns-Manville thermal insulation products, at
5 least there was a warning placed on those
6 products as early as 1964, right?

7 A. Right.

8 Q. The OSHA permissible exposure levels
9 for asbestos were first promulgated in 1971,
0 right?

1 A. The emergency standard was in '71 at
2 the end of the year and then the so-called
3 permanent standard in '72.

4 Q. And that PEL declines consistently
5 throughout the 1970s, right?

6 A. Well, just one time. OSHA, they have a
7 duty to protect workers in the setting of
8 standards, and the rest of the things they are
9 authorized by Congress to do, but they also have
0 to set standards which aren't technologically
1 feasible, and so in trying to balance health

1 Q. And you would expect that an asbestos
2 worker would be aware that that change had been
3 made, right?

4 MR. QUEENEY: Objection. No
5 foundation.

6 A. I would assume that a lot of asbestos
7 workers were aware of it, but I wouldn't assume
8 that they all were. I don't know how long it
9 took people to get any idea that there was really
10 some significant change going on in the world
11 with the creation of OSHA and the whole idea that
12 there was now going to be a Governmental agency
13 charged with protecting workers from occupational
14 safety and health hazards. That was really
15 something very new in this country in 1971.

16 Q. Right. It certainly would have a
17 material effect on workers, right?

18 A. Over time it had an effect.

19 Q. And as with the promulgation of that
20 emergency limit, there would have been a
21 significant impact on the way that asbestos

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1 protection and economics, OSHA issued a standard
2 in 1972 that set five fibers per.cubic centimeter
3 as the allowable exposure limit, the PEL, the
4 permissible exposure limit, and said that this
5 has to go down to two fibers per cc in 1976, and
6 this was a very clear example of the limitations
7 of OSHA's standards in protecting health because
8 they knew they were going to have to get sued and
9 go all the way to the Supreme Court to defend
0 whatever standard they published, and obviously
1 they didn't assume that the human body was going
2 to become any different than its susceptibility
3 to asbestos-related disease on July 1st, 1976
4 when exposure limits were said to change. Sorry
5 for the long answer.

6 Q. That's okay.

7 From the perspective, Doctor, of an
8 asbestos worker, the OSHA regulations, the
9 emergency standard, as you called it, was new in
0 1971, right?

1 A. Right.

1 workers did their jobs, right?

2 A. Not necessarily. Publishing
3 regulations in the Federal Register is a lot
4 easier than getting out there, enforcing them
5 across the country.

6 Q. When did OSHA get out and start
7 enforcing the regulations?

8 A. When did they get out?

9 Q. Yes.

10 A. Oh, that took time. In Maryland I
11 think they didn't try to do it by the Federal
12 Government going all over the country. They
13 tried to do it by delegating state agencies with
14 the authority to be the, in this state, Maryland,
15 equivalent of OSHA, so there would be a Maryland
16 OSHA set up, and they'd do Cal OSHA in California
17 and do it over the entire country, but it took
18 years to staff up these groups.

19 In the State of Maryland when I was an
20 air pollution control official in 1972 we had a
21 vast floor of people doing air pollution control,

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1 and in the far corner of the floor were a couple
2 old guys and a secretary who were supposed to be
3 protecting all the workers from the health and
4 safety hazards in the State of Maryland, so this
5 is what they started. They had to completely
6 staff up Maryland OSHA agency, and this took
7 several years. It wasn't probably until '73 or
8 '74 until they had anything approaching full
9 staff and an agency that was in place to then go
10 out there and start doing some serious
11 inspections.

12 Q. Would you agree with me, Doctor, that
13 by 1974 an asbestos worker would have felt the
14 impact of the OSHA regulations?

15 MR. QUEENEY: Objection.

16 A. Not necessarily. It really depends on
17 who that worker was employed by and what scrutiny
18 they may have been coming under from the
19 Government. The Governmental agencies, the
20 Government inspections were really pretty
21 limited. If you worked for some small

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1 construction contracting company as an insulation
2 worker or something like that, they might have
3 taken a long time to get around to you. The OSHA
4 inspectors would have rightly been concerned
5 first with Bethlehem Steel and in some of the
6 other major employers where industrial health and
7 safety hazards were well known to exist.

8 Q. That is an excellent example. Would
9 you agree with me that an asbestos insulation
10 worker working at Bethlehem Steel would have felt
11 the impact of the OSHA promulgations no later
12 than 1975?

13 MR. QUEENEY: Objection. No
14 foundation. It calls for speculation, and you
15 are misstating his evidence. He talked about
16 employers, not about insulation workers.

17 A. Indeed OSHA, they weren't just looking
18 for asbestos. They were looking for all kinds of
19 health and safety hazards. When you talk about
20 health and safety hazards in a steel mill, you
21 can go through the whole damn alphabet with

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1 health and safety hazards there are so many of
2 them. I remember going to Bethlehem as an air
3 pollution control official in 1973, and I was
4 afraid to walk around in that place it was so
5 terrifying. With the noise and the scale of huge
6 cranes and trucks and the steam vents blasting
7 out around you, you got the feeling that
8 something could blow up anywhere any time, and
9 then there were, of course, the insidious health
10 hazards like asbestos and the smoke and the
11 emissions from all these industrial processes all
12 around, so it wasn't as if the Government went
13 out there and concentrated on asbestos when OSHA
14 was created. They had all kinds of things to
15 deal with.

16 Q. Asbestos was one of the things they had
17 to deal with, though, right?

18 A. Right. I just can't say -- your
19 questions are questions that basically call for
20 some kind of a general conclusion on what was
21 going on in this country everywhere, and there's

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1 no way to say that. Some places the Government
2 inspectors were, they might have had a guy that
3 was doing something about asbestos and enforcing
4 the asbestos standard. That person, even he had
5 a limited, he or she had a limited amount of time
6 to devote to this, a limited amount of laboratory
7 backup to do air sampling and analysis, a limited
8 amount of lawyer backup to go out and issue fines
9 and process citations. It's impossible to answer
10 the kinds of questions you are asking me about
11 when an asbestos insulation worker should
12 definitely have known all about OSHA absent any
13 more information in the question about where the
14 guy worked or -- and even if you had the most
15 elaborate question, I probably couldn't answer it
16 if you are talking about stuff that went on in
17 Illinois in the 1970s.

18 Q. You are trying to cut me off there
19 which is fine. Let me ask it to you this way,
20 Doctor, and see if we can reach some language
21 that we can agree on.

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1 Is it fair to say that although you
2 cannot offer an opinion with regard to any
3 specific incidence, that an asbestos worker
4 working in the United States in 1975 should have
5 felt the impact of OSHA's PELs for asbestos by
6 that point in time?

7 MR. QUEENEY: Objection to the form of
8 the question. The question doesn't address
9 whether you are talking about an inspection,
10 whether you are talking about a reduction in the
11 amount of dust at Bethlehem Steel or anything
12 else. No portion is defined or there is no
13 foundation for it.

14 A. I think they would have felt the impact
15 if only because of the liabilities that were
16 already becoming apparent to manufacturers of
17 asbestos insulation. The manufacturers of Kaylo
18 and similar products didn't wait for EPA to ban
19 asbestos and insulation products to stop using
20 it. They were already realizing that they are
21 going to dig a hell of a hole for themselves in

1 warnings on the labels, yes.

2 Q. But there were labels that were
3 required by OSHA, right?

4 A. Right. On some products.

5 Q. And were those required for products
6 that were being sold or all products that were in
7 place?

8 A. Well, just for products, new products
9 being sold. I wouldn't think that they were
10 talking about dealing with stuff that was already
11 like insulation already on pipes.

12 Q. Doctor, this is a subject that you have
13 testified about before, and I don't want to do
14 the usual run-through on it, but you have given
15 some testimony about the dust jacket on the first
16 edition of your book, right?

17 A. Right.

18 Q. And you have testified that you didn't
19 author the words for the dust jacket, right?

20 A. Right.

21 Q. And correct me if I am wrong, but the

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1 terms of long-time liability and that they better
2 reformulate those products as soon as they could.

3 Q. And the EPA had --

4 A. So there were a number of things that
5 were going on that the workers might not have
6 been aware of, but they were the beneficiaries of
7 some of those things. The individual workers
8 might not know anything was happening, and
9 suddenly they are handling new material that is
10 not asbestos-containing material because of
11 forces that are going on that they don't even
12 know about.

13 Q. OSHA also had labeling requirements,
14 right?

15 A. Yes. Very mild labeling requirements.
16 Not the kind of stuff that would have grabbed
17 you.

18 Q. When you say "mild", you are referring
19 to the language required in the label?

20 A. I mean the asbestos companies were
21 successful in getting OSHA not to require cancer

1 dust jacket indicates that your book would be
2 particularly helpful to a lawyer in an asbestos
3 case who was trying to prove his case, right, --

4 A. Something like that.

5 Q. -- suggesting that your book is
6 particularly helpful to plaintiffs' lawyers,
7 right?

8 A. Or at least it could be read that way,
9 yes. I didn't think that the language was
10 balanced or fair to me.

11 Q. And as you said, you didn't write that
12 language, but the publisher did?

13 A. Right.

14 Q. And the publisher put it on the dust
15 jacket, right?

16 A. They put it on the first dust jacket
17 right, the First Edition.

18 Q. The publisher was the distributor of
19 the book?

20 A. Sure.

21 Q. You were the author of the book,

<p style="text-align: right;">Page 218</p> <p>1 right?</p> <p>2 A. Right. As they explained it, they</p> <p>3 owned the book. I was just the author.</p> <p>4 Q. And you believe that what the publisher</p> <p>5 said about your book shouldn't be attributed to</p> <p>6 you because you didn't write it, right?</p> <p>7 A. Well, I told them I'm going to hear</p> <p>8 about this for the rest of my life, and so far I</p> <p>9 have been correct, and I told them it was wrong,</p> <p>10 and eventually they did change it. After two</p> <p>11 years later, we had a Second Edition. I said</p> <p>12 look, this has now been accepted as a Doctoral</p> <p>13 thesis by Johns Hopkins, will you change the</p> <p>14 language on the dust cover to be more even handed</p> <p>15 to me, and they did.</p> <p>16 Q. It's your opinion, Doctor, that those</p> <p>17 statements are not fairly attributable to you?</p> <p>18 A. Right.</p> <p>19 Q. You'd agree that the manufacturer of a</p> <p>20 product isn't responsible for what the</p> <p>21 distributor says about it, right?</p>	<p style="text-align: right;">Page 220</p> <p>1 MR. QUEENEY: Objection to the</p> <p>2 testimony.</p> <p>3 A. I think they were. I think that the</p> <p>4 nontoxic language was originally introduced by</p> <p>5 Owens-Illinois in its own materials in 1952 that</p> <p>6 I talked about and that this was basically copied</p> <p>7 in materials that carried both companies' logos</p> <p>8 in 1956.</p> <p>9 Q. Do you have any reason to believe,</p> <p>10 Doctor, that it was anything more than</p> <p>11 Owens-Corning simply copying the words that had</p> <p>12 been previously used?</p> <p>13 A. Even if that's all it was, I think</p> <p>14 Owens-Illinois bears a substantial responsibility</p> <p>15 for the use of that language.</p> <p>16 Q. Just so I am straight then, it is your</p> <p>17 opinion that even if Owens-Corning used the term</p> <p>18 nontoxic without permission or input of</p> <p>19 Owens-Illinois, that Owens-Illinois still bears</p> <p>20 responsibility because it had used the term in</p> <p>21 1952?</p>
<p style="text-align: right;">Page 219</p> <p>1 A. That's a different story. I mean, if</p> <p>2 the manufacturer has told the distributor that in</p> <p>3 no way you can tell the people that this product</p> <p>4 is nontoxic, then maybe the manufacturer has</p> <p>5 little responsibility whereas if the manufacturer</p> <p>6 is in cahoots with the distributor in using that</p> <p>7 kind of language to sell the product, that's the</p> <p>8 extreme opposite end of the scale.</p> <p>9 Q. Are you saying that you told the</p> <p>10 publisher before the publication of the dust</p> <p>11 jacket they shouldn't use that language?</p> <p>12 A. Yes.</p> <p>13 Q. We talked about Owens-Illinois and</p> <p>14 Owens-Corning. You just used the example as</p> <p>15 being in cahoots. I think we talked about this,</p> <p>16 although you have used a slightly different</p> <p>17 term.</p> <p>18 Can we agree that you don't have any</p> <p>19 evidence that Owens-Illinois was in cahoots with</p> <p>20 Owens-Corning's use of the term nontoxic in</p> <p>21 1956?</p>	<p style="text-align: right;">Page 221</p> <p>1 MR. QUEENEY: Objection. It is not his</p> <p>2 testimony. He referred to, for example, both the</p> <p>3 trademarks.</p> <p>4 A. I don't know how you can establish that</p> <p>5 what Owens-Corning -- first of all, there are</p> <p>6 several things: The marketing of the product may</p> <p>7 or may not have been done exclusively by</p> <p>8 Owens-Corning without input by Owens-Illinois.</p> <p>9 Q. You don't have any information one way</p> <p>10 or the other, right?</p> <p>11 A. Let's give Owens-Illinois the benefit</p> <p>12 of the doubt there and say Owens-Illinois didn't</p> <p>13 have anything to do with the publication of that</p> <p>14 brochure in 1956. Still the fact that</p> <p>15 Owens-Illinois had pioneered in the use of that</p> <p>16 language means to me that Owens-Corning didn't</p> <p>17 just pick it out of the air. They didn't just</p> <p>18 make that up themselves. They were influenced by</p> <p>19 Owens-Illinois in the selection of that very</p> <p>20 seriously misleading language in the promotion of</p> <p>21 the product. If Owens-Illinois hadn't done it</p>

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1 first, then you might have a chance to talk me
2 into saying that Owens-Corning did this on their
3 own and maybe somehow Owens-Illinois wasn't
4 responsible in any way. That's a stretch, but I
5 could see maybe, but not with this stuff from
6 1952 where Owens-Illinois is using this nontoxic
7 language in stuff that they completely
8 controlled.

9 Q. So that we are clear, Doctor, and I
0 just want to make sure we are clear on it, your
1 opinion is that even if Owens-Corning did it
2 independently, meaning without consent or input
3 or permission of Owens-Illinois, that
4 Owens-Illinois still bears responsibility for
5 Owens-Corning's use of the term nontoxic in 1956
6 merely because they had used the term in the same
7 context in 1952?

8 MR. QUEENEY: Objection.

9 A. Not only because of that but also
0 because of the fact that Owens-Illinois was,
1 after all, sharing in the profits that accrued

1 commit mass murder on the public was hire some
2 dummies to go and market their product for them
3 who were only good at sales and didn't know
4 anything about the hazards of the product and
5 didn't tell the consumer about the hazards of the
6 product, that would just be an invitation to
7 social disaster to have a legal situation where
8 that was sufficient to just go and hire some guys
9 to sell your product for you and thereby launder
10 all responsibility for misrepresentations
11 associated with the product that you were, after
12 all, profiting from the manufacture and sale of.

13 Q. And you have no idea whether your
14 opinion is consistent with Illinois law, right?

15 A. That's right.

16 Q. Doctor, referring to the last page of
17 Exhibit 1, you talk about or you have the
18 statement "that was what was available in the
19 medical libraries to anyone who knew how to spell
20 the word asbestosis."

21 A. Right.

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1 from this market, that Owens-Illinois --
2 Owens-Corning might have been selling it, but
3 Owens-Illinois was selling it to Owens-Corning,
4 that they were both profiting by moving these
5 products into the channels of commerce, and
6 Owens-Illinois bears the responsibility, in my
7 opinion, even in the kind of scenario you are
8 drawing for assuring that whoever they delegate
9 or hire to market their products isn't
0 misrepresenting them in such a serious manner as
1 that. I don't see how Owens-Illinois can
2 completely escape responsibility given that they
3 were producing and profiting from the sale of the
4 product at the same time that Owens-Corning was
5 charged with the distribution.

6 Q. And when you say responsible, you are
7 expressing your own opinion as opposed to some
8 attempt to give a legal opinion, right?

9 A. That's right. I mean, I am speaking
0 from my perspective as a public health worker
1 that if all the company had to do to go out and

1 Q. Do you see that?

2 A. Yes.

3 Q. Am I correct that what you are
4 expressing in that paragraph is that you don't
5 have any particular skill with regard to finding
6 these materials, that anyone could have done it,
7 right?

8 A. Well, putting aside the question of my
9 skills, I am saying that there was a vast amount
10 of information that was available in the medical
11 libraries to anybody who knew that asbestos was
12 dangerous and wanted to know about what was known
13 about the dangers of asbestos. You had to know
14 it was dangerous to get into the medical library
15 and ask for information about it. That's the
16 biggest hurdle. Once you've gotten past that,
17 once you know it is dangerous, then there's a
18 world of information available to you. Whether
19 you started looking for it in the medical
20 libraries in the 1940s, '50s, '60s or '70s, there
21 was a lot of information available certainly to

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1 any company with educated people that are used to
 2 using things like libraries to amass information.
 3 Q. Is it fair to say, Doctor, that you are
 4 telling the reader that the material that you
 5 have cited here was available to anyone who was
 6 sufficiently motivated to find, that it was not
 7 found by you because of any skill that you had in
 8 research?
 9 A. Well, I am saying overall that's true,
 10 that the overall picture of the history of the
 11 development and knowledge on asbestos and
 12 disease, which is something I was asked initially
 13 to look up by a plaintiff's lawyer in 1976, the
 14 picture I developed in 130 hours of work is not
 15 different from the overall picture that I
 16 developed after writing a Doctoral thesis in the
 17 900-page book, the basic outline of how that
 18 knowledge developed. The principal references of
 19 Dreessen and Merewether and so forth are easy to
 20 find. If you opened up Selikoff's conference
 21 proceedings, that opened everything up to you in

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1 terms of everything that had been published, but
 2 that in terms of the overall picture of the
 3 development of scientific knowledge, it's all
 4 there by way of reference right there in that one
 5 volume.
 6 Q. At the beginning of the deposition,
 7 Doctor, you mentioned that Mr. Berger provided
 8 some information to you about Owens-Illinois'
 9 ownership of Owens-Corning.
 10 What decision did that play in the
 11 development or statement of your opinions in this
 12 case?
 13 A. Well, again, this is more of a legal
 14 question, but I was just curious to know how long
 15 Owens-Illinois had a substantial holding of the
 16 stock in Owens-Corning, and I am looking at
 17 Owens-Corning's financial health generally during
 18 these years but in particular, the part of it
 19 that accrued from the sale of Kaylo, and in the
 20 period 1958 to 1972 and during that period of
 21 time how much of Owens-Corning did Owens-Illinois

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1 own, and I was -- you know, I thought it makes a
 2 difference to me whether they owned 3 percent or
 3 30 percent, and I was surprised to find that as
 4 late as 1970 they still owned about 30 percent of
 5 Owens-Corning.
 6 Q. Doctor, you testified before that you
 7 had never studied what proportion of
 8 Owens-Corning's business was constituted by its
 9 Kaylo sales, right?
 10 A. That's right.
 11 Q. So you don't know anything about the
 12 financial health of Owens-Corning in relation to
 13 its Kaylo revenues, right?
 14 A. That's right. I haven't put that piece
 15 of the story together.
 16 Q. Is it fair to say that your recently
 17 obtained knowledge about Owens-Illinois'
 18 ownership of Owens-Corning's stock has not yet
 19 influenced your opinions as expressed in this
 20 case?
 21 A. Well, I don't know. Like I say, this

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1 is more a matter for a question of the law and
 2 whether there is anyplace in a case like this for
 3 considering the fact that not only had
 4 Owens-Illinois pioneered in the development of
 5 the Kaylo product and the marketing of the
 6 product and the manner we have discussed, not
 7 only had they pretested the product and been told
 8 what they were told about the Saranac Laboratory
 9 about it and not only had they done all these
 10 other things, but they continued to have this
 11 financial relationship to the profitability of
 12 Kaylo past the time that they no longer were
 13 selling it themselves.
 14 Q. You are playing lawyer now, right? You
 15 are thinking whether or not that could fit into a
 16 case like this?
 17 A. I guess you might say that. It is just
 18 something I hadn't thought of before, and I
 19 thought, you know, I wonder how much of
 20 Owens-Corning they continued to own in the next
 21 10 years or so after 1958, but I don't know how

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important that is for you people. You people are going to basically have this case processed based on the law in the State of Illinois and the rulings the judge makes on the various papers you provide to him. I just thought I wanted to know, and I think it is consistent with the view that Owens-Illinois' lack of any action after 1958 to somehow reach out and try and protect people was, well, you know, maybe it was financially influenced in some small part by the fact that they were in this way profiting by the sale of Kaylo.

Q. Doctor, I want to focus just on your opinions in this case. It sounds to me that what you are saying is that this is a new fact that you have discovered, and you are not sure exactly where it fits in, but it doesn't have any demonstrable effect on your opinions in this case?

MR. QUEENEY: Objection to three or four of those terms that you used because you

1 Q. Anything else?

2 A. That's it.

3 Q. And just so we are clear, when you use
4 the word responsible in that sentence, you are
5 not talking about legal responsibility? You are
6 talking about responsible in your opinion?

7 A. Right. More in the sense of a moral
8 and ethical responsibility. The legal
9 responsibility I don't pretend to know about.
10 That's really beyond the scope of my course.

11 Q. Do you have any training or
12 certification in ethics?

13 A. No, but I would say that my ethics have
14 been put to a very, very considerable test over
15 the years.

16 Q. You have been tempted; is that right?

17 A. No. No one has ever even offered to
18 pay me off, but in terms of just being challenged
19 and being charged with various types of things
20 that might arguably be unethical, one deals with
21 a certain amount of flack being involved in the

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don't define any of them. Demonstrable is the last one.

A. I don't know. It just depends on what questions I am asked. When you say demonstrable effect on my opinions in the case, what opinions? What's demonstrable? I am not trying to give you a hard time. I am just saying I'd like to be able to answer the question rather than quibble about what it says.

Q. Let me try to ask it in a different way.

How did your discovery of this fact influence your opinion in this case, if at all?

A. I just think that this additional fact, I suppose, is consistent with a view that Owens-Illinois bears a continuing responsibility for the way Kaylo was sold without warning labels in the years after 1958 and that then they profited by, indirectly they profited by this business as usual approach in the marketing and sale of Kaylo.

1 field that I am involved in and the manner that I
2 have involved myself in.

3 Q. Doctor, on Exhibit Number 2 the second
4 word there is "clarify", right?

5 A. Right.

6 Q. That's a word that Mr. Queeney chose,
7 right?

8 A. Yes.

9 Q. Not you?

10 A. That's right.

11 Q. Would you agree with me that the
12 opinions that are expressed in Exhibit Number 2
13 are not expressed in Exhibit Number 1?

14 MR. QUEENEY: Objection.

15 A. You mean this is number 1, this is
16 number 2?

17 Q. Right.

18 A. Right. That's why the augmentation was
19 done so that there would be a sufficient record
20 before the Court to deal with the situation from
21 here on in.

<p style="text-align: right;">Page 234</p> <p>1 Q. This is additional information? It 2 doesn't clarify anything that is in Exhibit 3 Number 1, right? 4 A. Right. He might have changed the word 5 clarify to augment. Right. Technically I think 6 your suggestion is well taken. 7 Q. So if that said to augment my prior 8 report or even to add to my prior report, it 9 would be accurate, as far as you are concerned? 10 A. Right. 11 MR. FISCHER: That's all I have for 12 you. 13 MR. QUEENEY: I have a few questions. 14 EXAMINATION BY MR. SWEENEY: 15 Q. When was your Doctoral thesis written? 16 A. 1981 to 1985. 17 Q. And when was your book first published? 18 A. The last month of 1984. 19 Q. I'm sorry. The First Edition. 20 A. The First Edition came out in late 21 1984.</p>	<p style="text-align: right;">Page 236</p> <p>1 A. I estimate that it was about 6,000 2 hours to write the First Edition. 3 Q. Do you have today on opinion as to 4 Owens-Illinois' knowledge as to the relationship 5 between Kaylo and Kaylo dust and asbestosis as of 6 1948 and then specifically its receipt of reports 7 from the Saranac Laboratory in late 1948? 8 MR. FISCHER: Object to form and 9 foundation. 10 A. Well, in November 1948 the company 11 received Dr. Vorwald's bad news about the fact 12 that all nine of the animals allowed to survive 13 in the experiment from 30 to 37 months from the 14 start of the experiment, all nine of these 15 animals had developed asbestosis, and Vorwald had 16 very strong words of warning to the company 17 saying sorry to tell you this, but at least it is 18 better to learn this now in experimental animals 19 rather than later in industrial workers. 20 Q. Based upon that disclosure of that 21 report, do you in fact have an opinion, yes or</p>
<p style="text-align: right;">Page 235</p> <p>1 Q. How many editions have you published 2 since 1984? 3 A. There are four. The second was in 4 '86. The third was in 1990. And the fourth was 5 '96. 6 Q. Would you briefly describe or summarize 7 the amount of work and the kind of work you did 8 to locate the sources that you used to prepare 9 and publish the First Edition of that book. 10 A. I basically tried to read everything 11 that had been published about the hazards of 12 asbestos in medical and nonmedical sources of all 13 kinds, tried to augment that with review of 14 Governmental records, archives of scientists in 15 institutions and interviews with old-timers in 16 the field of occupational health. 17 Q. Do you have any idea or recollection 18 and/or estimate as to the amount of hours you 19 spent preparing all the information that led to 20 this First Edition? 21 MR. FISCHER: Object to form.</p>	<p style="text-align: right;">Page 237</p> <p>1 no, as to Owens-Illinois' knowledge as to a 2 relationship whether it is an association or a 3 causal relationship between Kaylo and Kaylo dust 4 and asbestosis as of late 1948? 5 MR. FISCHER: Object to form and 6 foundation. 7 A. I think the company clearly was aware 8 that Kaylo could cause asbestosis in late 1948. 9 This confirmed what Gardner had predicted in the 10 outset of his studies in 1943 when he said that 11 with the element of Kaylo they had all the 12 ingredients of a first-class hazard. 13 Q. Over and above the various 14 correspondence and reports that Owens-Illinois 15 received from 1943 through 1948, is there any 16 other published literature that you think has a 17 bearing upon your opinion that Owens-Illinois 18 knew that there was a relationship between Kaylo 19 and Kaylo dust on the one hand and asbestosis on 20 the other as of 1948? 21 MR. FISCHER: Object to form and</p>

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1 foundation.

2 A. Well, then there would just be the
3 background literature of medical and scientific
4 articles they were accumulating in their very
5 substantial library containing numerous reports
6 of asbestosis in insulation workers and other
7 workers exposed to asbestos, reports of
8 asbestosis and in some cases accompanied by
9 cancers that were being attributed to their
10 asbestos exposure, so the company had both the
11 experimental data on its own product and the
12 background medical and scientific picture into
13 which this new data fit.

14 Q. As to that opinion and its bases, are
15 both those opinions and its bases found in your
16 book?

17 MR. FISCHER: Object to form.

18 A. I don't know about that, the opinions.
19 The art of writing a book isn't a process of
20 making a legal argument, but certainly the
21 underlying data are contained in the book. The

1 from 1956 I think on page 613 under the
2 Owens-Corning section in Chapter 9.

3 Q. You have referenced both with respect
4 to my questions and questions put to you
5 repetitively by Mr. Fischer as to Mr. Vorwald's
6 report.

7 Do you recall that there was in fact a
8 written report sent from Saranac under his
9 signature to Owens-Illinois with a date of about
10 October 30th, 1948?

11 MR. FISCHER: Object to form.

12 A. Yes.

13 MR. FISCHER: And foundation.

14 Q. And is that in fact the same report
15 that you have been referring to as the Vorwald
16 report?

17 A. I don't know that I have referred to
18 only one. I referred to a Vorwald report from
19 1951 from the Kaylo plant, the manufacturing
20 plant, and I think on another occasion I did
21 refer to the 1948 report you are talking about.

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1 purpose was to present the vast amount of medical
2 and scientific information, both published and
3 unpublished, and on occasion I give opinions, but
4 for the most part, I simply present the
5 information, and I think in many cases doing that
6 is tantamount to giving an opinion.

7 Q. For example, you reference the Saranac
8 reports or correspondence. Are some or multiple
9 reports and correspondence from Saranac
10 identified and/or quoted in your book with
11 respect to its report to Owens-Illinois as to
12 Kaylo?

13 A. Oh, yeah.

14 MR. FISCHER: Object to form.

15 Q. Do you know where in your book that
16 applies?

17 A. I was reading from Chapter 4 and the
18 section in Chapter 9, as I pointed out. It's
19 only about eight or ten pages on Owens-Illinois.
20 There is also reference to the Owens-Illinois and
21 Owens-Corning, as I call it, the sales brochure

1 They are both referenced in the book.

2 Q. What is the status of -- strike that.

3 To what extent does the Vorwald 1948
4 report report to Owens-Illinois its findings as
5 to the connection between Kaylo and Kaylo dust on
6 the one hand and asbestosis on the other?

7 MR. FISCHER: Objection. Form,
8 foundation, and vague.

9 A. The 1948 report says that Kaylo can
10 cause asbestosis and it is an industrial health
11 hazard.

12 Q. Switching for the moment to what you
13 have referred to as the background medical or
14 scientific information, does your book either
15 within or outside of Chapter 4 refer to that
16 other information that you think has some bearing
17 upon Owens-Illinois' knowledge as of late 1948 as
18 to the extent to which Kaylo might or did in fact
19 cause asbestosis in humans?

20 MR. FISCHER: Object to form.

21 A. Yes. Those references are cited

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1 throughout the first five chapters of the book.
2 Q. As you sit here today without opening
3 your book, can you think of one, two or three of
4 those non-Saranac background reports that you
5 think have some material bearing upon and support
6 in fact to your opinion that Owens-Illinois knew
7 about the association relationship between Kaylo
8 and asbestosis as of 1948?

9 MR. FISCHER: Object to form and
10 foundation.

11 A. Well, let me look at the library
12 materials to refresh my recollection.

13 MR. FISCHER: Just so we are clear,
14 Dr. Castleman is referring to his book.

15 A. Most of the material they would have
16 obtained prior to 1948 would have been in the
17 Journal of Industrial Hygiene and Toxicology, the
18 articles and abstracts contained therein. There
19 were probably 50 to a hundred articles and
20 abstracts on asbestos and disease in that journal
21 during the period 1928 to 1948, and these would

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1 have talked about in some cases asbestosis in
2 insulation workers. Among the articles that was
3 abstracted was the report of Holleb Angrist in
4 1942 which reported on lung cancer as well as
5 asbestosis in a couple of insulation workers
6 reported by doctors in New York.

7 Q. Just so the record is clear, how is it
8 that you have formed an opinion that one or more
9 of those articles were in fact within
10 Owens-Illinois' library?

11 A. Owens-Illinois has acknowledged in
12 answers to interrogatories that they received the
13 Journal of Industrial Hygiene and Toxicology from
14 1928 to 1949 and its successor journals from 1950
15 through 1958, and that is to say the same journal
16 I think by other names. They also received a
17 number of other journals in the following years,
18 in the 1940s and the late '40s and '50s,
19 Industrial Medicine and Surgery from 1949 to
20 1958, the British Journal of Industrial Medicine
21 where Dr. Richard Doll's study showing lung

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1 cancer was an asbestos disease was published in
2 1955. They received it from 1949 to 1958,
3 according to these answers to interrogatories,
4 and that's all in addition to the Industrial
5 Hygiene Digest which it was published by the
6 Industrial Hygiene Foundation which
7 Owens-Illinois helped to form with their man on
8 the Board of Directors for the first 20 years or
9 so.

10 Q. Which man was that?

11 A. That's A.C. Hirth. I have a picture of
12 him on 728. Page 728 of the book shows the
13 members of the Industrial Hygiene Foundation
14 meeting in the Board of Directors room in
15 Johns-Manville Corporation in 1945, and the
16 Industrial Hygiene Digest had hundreds of
17 articles or, rather, abstracts of articles
18 published from around the world.

19 Q. What is an abstract?

20 A. A summary, usually one paragraph or two
21 summarizing the essential contents of an article.

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1 Q. Over and above that kind of information
2 that your investigation has shown that they
3 actually received, did you receive any
4 information that Owens-Illinois was precluded
5 somehow from discovering the kinds of information
6 and articles that you found when you began your
7 investigation in the 1970s?

8 MR. FISCHER: Objection to form and
9 foundation, and relevance.

10 Q. Can you answer that question?

11 A. Yeah. I think that Owens-Illinois was
12 well placed to find any additional articles that
13 were published, and even in addition to that,
14 maybe even go beyond stuff that was published.
15 For example, the Asbestos Textile Institute hired
16 the Industrial Hygiene Foundation to do a survey
17 of the asbestos textile factories in the United
18 States, and the author of the survey, Wesley
19 Hemeon, H-E-M-E-O-N, repeatedly denounced the
20 optional exposure limit of five million particles
21 per cubic foot as not reliable.

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1 Q. When was that?

2 A. That was in 1947, and that was not
3 published, but I think that Dr., I think
4 Mr. Hemeon was clearly accessible to people at
5 Owens-Illinois. In this particular picture we
6 have a senior lawyer from Owens-Illinois sitting
7 at the table and Mr. Hemeon, Leroy Gardner
8 standing, Leroy Gardner, the director of the
9 Saranac Laboratory, standing behind him in the
10 Industrial Hygiene Foundation trustees meeting in
11 1945, so I think that if they wanted to know, I
12 say if Owens-Illinois wanted to know what Wes
13 Hemeon thought of the TLV for asbestos, he would
14 have told them the same thing he wrote in the
15 report to the ATL, so they had additional access
16 to information that maybe even went beyond what
17 was in the published scientific literature.

18 MR. FISCHER: Let me object and move to
19 strike Dr. Castleman's answer as without
20 foundation and narrative and irrelevant.

21 Q. Do you have any information, have you

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1 seen any information to the effect that the
2 people from Owens-Illinois who sat on the IHF
3 were somehow precluded from obtaining information
4 developed by the IHF --

5 A. No.

6 MR. FISCHER: Objection.

7 Q. -- or its control?

8 MR. FISCHER: Objection. Form,
9 foundation and relevance.

10 A. No.

11 Q. Mr. Fischer asked you a series of
12 questions about your ability to go into a library
13 and find information.

14 Have you seen any information anywhere
15 to the effect that Owens-Illinois or any of its
16 individual representatives had any kind of a
17 handicap with respect to obtaining the same kind
18 of information that you found?

19 MR. FISCHER: Objection. Form and
20 foundation.

21 A. No.

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1 Q. With respect to cancer, do you have an
2 opinion as to whether or not Owens-Illinois had
3 knowledge as to a relationship between Kaylo
4 and/or Kaylo dust on the one hand and a cancer as
5 of the late 1940s?

6 MR. FISCHER: Objection. Form and
7 foundation.

8 A. I think that the industrial hygienists,
9 Willis Hazard and the company medical director,
10 Dr. Shook, should have been aware of the fact
11 that there was a substantial body of literature
12 published on the association of asbestos work and
13 cancer, and this was, for example, the subject of
14 an editorial in the Journal of the American
15 Medical Association in August of 1949 and the
16 same month was summarized neatly in a
17 one-paragraph abstract in the Industrial Hygiene
18 Digest in August of 1949, and this was a
19 statistical report from England showing that
20 among 235 individuals who had died with
21 asbestosis, that 13 percent of them also had

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1 cancers of the lung and pleura, and this was
2 contrasted with only 1 percent rate of cancers of
3 the lung and pleura in the general population
4 seen at autopsy.

5 Q. Over and above the two articles that
6 you just mentioned in the late 1940s, does your
7 book contain other articles or publications to
8 this same effect, namely that there was some sort
9 of association between asbestos and/or cancer?

10 MR. FISCHER: Objection.

11 A. Yes.

12 MR. FISCHER: Form and to relevance.

13 A. Yes. I have seen about 80 articles and
14 abstracts that were published before 1950 in
15 varying degrees raising this question and concern
16 about asbestos as a cause of occupational cancer.

17 Q. And based upon those articles, what was
18 as far as you understand it, what was the --
19 strike that.

20 What knowledge should have
21 Owens-Illinois had had it read those articles

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1 with respect to the association between asbestos
2 and cancer as of the late 1940s?

3 MR. FISCHER: Objection to form.
4 Foundation. Vague.

5 A. I think Owens-Illinois should have
6 known that an insulation product like Kaylo by
7 the late 1940s, they should have known certainly
8 that this product was capable of causing both
9 asbestosis and occupational cancer.

10 Q. Was the information about cancer aided
11 or augmented or perhaps clarified by the Doll
12 report in 1955?

13 MR. FISCHER: Objection. Form.
14 Foundation and pronunciation.

15 A. There was a report published by Richard
16 Doll in 1955 which I have mentioned that
17 basically showed that asbestos factory workers
18 had 10 times lung cancer as would have been
19 expected among men from the regions where they
20 worked comparing the mortality of the workforce
21 to the mortality of the general population.

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1 Q. Was that report generally considered
2 within the medical and/or scientific communities
3 as something that established a causal
4 relationship as that term has been defined by
5 Mr. Fischer between asbestos and cancer as of
6 1955?

7 MR. FISCHER: Objection.

8 A. Yes.

9 MR. FISCHER: Form and foundation.

10 A. Yes. The Lancet, for example, one of
11 the major British medical publications, had an
12 editorial after this article appeared saying that
13 Doll has definitely established that asbestos
14 causes lung cancer.

15 Q. You were asked certain questions about
16 the TLV and the TLV for asbestos.

17 Was in fact the threshold limit value
18 for asbestos in the late 1940s and early 1950s at
19 five million parts per cubic foot?

20 A. Yes.

21 Q. What do you understand as the origin of

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1 that TLV? How did it come about being accepted
2 as a TLV?

3 A. It had originally been recommended in a
4 1938 public health service study of workers whose
5 average age was only 32, and this then got
6 adopted into codes in some states, and the TLV
7 Committee when they put together the first list
8 of TLVs in 1946 included this limit for asbestos
9 along with 140 limits for other substances, and
10 then the subject doesn't seem to have been
11 seriously reconsidered by them until sometime in
12 the mid-'60s.

13 MR. FISCHER: Objection to the
14 narrative and nonresponsive nature of
15 Dr. Castleman's answer.

16 Q. When Mr. Fischer was asking you a
17 series of questions, you mentioned that some of
18 the TLVs, according to your investigation, were
19 not found to be justified.

20 Do you have an opinion as to whether or
21 not the adoption of the 1938 MPPCF 5 was

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1 justified in 1946?

2 MR. FISCHER: Objection to the form,
3 and vagueness and foundation.

4 A. Well, it was justified in the sense
5 that some protection is better than none, but one
6 couldn't really rely on this exposure limit as
7 being safe. As Dr. Vorwald pointed out, these
8 limits in general couldn't be relied upon as
9 safe. There was an incomplete body of knowledge
10 on the dose response relationship of asbestos
11 along with the other 140 substances on the list
12 in human beings, sometimes varied and incomplete,
13 and in the case of asbestos, we had the
14 additional complication that the agent of concern
15 wasn't being directly measured in the air. They
16 were using total dust counts instead of specific
17 analysis of the airborne concentrations of
18 asbestos fibers, so they were using a total dust
19 count as a surrogate measure for the agent of
20 concern even though the vast majority of the
21 airborne particles were known to be other things

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1 than asbestos even in asbestos textile plants, so
 2 this made it even more useless to rely on
 3 asbestos TLV than for TLVs for other substances
 4 where at least the airborne sampling and analysis
 5 method was sampling and analyzing only trichloral
 6 ethylene or lead or whatever the agent of concern
 7 was.

8 MR. FISCHER: Objection to the
 9 narrative, nonresponsive nature of
 10 Dr. Castleman's answer as well as to the scope of
 11 his opinion in relation to his reports.

2 Q. That opinion with respect to the
 3 unreliability of the TLV, does that opinion
 4 appear in sum and substance in your book?

5 MR. FISCHER: Objection to form.

6 A. I think so, yes.

7 Q. Can you identify for Mr. Fischer in the
 8 record what portion of your book addresses the
 9 inadequacy on justifying the nature of the TLVs?

10 A. Well, Chapter 4 is all about the TLV.

11 Q. You mentioned specifically that the

1 Q. Was there prior to 1938 and/or 1948 any
 2 published literature with respect to workers
 3 getting asbestosis working at what was thought to
 4 be less than five million parts per cubic feet?

5 MR. FISCHER: Objection. Form.
 6 Foundation and vague.

7 A. There was very little information on
 8 that, but there was one article that was cited by
 9 the Public Health Service, the Pennsylvania study
 10 by Fulton and his co-workers, and they found that
 11 there were workers exposed to as little as 4.64
 12 million particles per cubic foot who developed
 13 asbestosis, so here we had an example of
 14 exposures less than five million causing the
 15 disease and, yet, the Public Health Service
 16 report saying okay, let's at least get exposures
 17 down to five million.

18 Q. Did the Saranac Laboratory do any
 19 studies as to exposure levels, to your
 20 knowledge?

21 MR. FISCHER: Objection to form and

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1 study from which the TLV was borrowed was in 1938
 2 and that improperly in your mind at least focused
 3 upon an average age with the cohort of 32 years.
 4 Would you explain that.

5 MR. FISCHER: Object to form.

6 A. Well, this was the youngest of 14
 7 industrial cohorts that the U.S. Public Health
 8 Service had done some surveys on, different
 9 industrial cohorts, and in this particular group
 10 the asbestos industry, the asbestos companies
 11 that were surveyed had replaced 150 out of less
 12 than 600 of the workers, so they had new workers
 13 with no, with clean lungs who hadn't been
 14 breathing asbestos all those years, and they were
 15 hired to replace people who the Public Health
 16 Service estimated more than half of them had
 17 asbestosis. This was based partly on the fact
 18 that there had been three other medical articles
 19 published in 1936 about the large numbers of
 20 asbestosis cases among asbestos textile workers
 21 in the Carolinas.

1 foundation.

2 A. Well, they did some air sampling in the
 3 Kaylo plant in 1951 that we have talked about.
 4 They also, at least Dr. Gardner in 1943 wrote
 5 critically in a confidential report to other
 6 companies that he felt that the air sampling
 7 method for asbestos was not any good and that
 8 they needed to develop something more specific,
 9 and he was working on the development of an
 10 electrostatic precipitator type of sampling
 11 device. Gardner died three years later and
 12 nothing else was ever heard about this device.

13 Q. The literature that you have reviewed,
 14 does that indicate that after receiving in late
 15 1948 reports from Saranac to the effect that
 16 seemingly negligible proportions or very small
 17 amounts or numbers of fibers would cause
 18 asbestosis, that Owens-Illinois took it upon
 19 itself to conduct any study to better define what
 20 would be a safe level?

21 MR. FISCHER: Objection. Form.

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1 Foundation. Vague.

2 A. No. Owens-Illinois didn't do any such
3 thing.

4 Q. Did anyone ever say that the five MPPCF
5 was in fact a safe TLV?

6 MR. FISCHER: Objection. Form.
7 Foundation.

8 A. I think there was one article that
9 referred to it as a safe limit. I think it was
10 because some people would use the term safe limit
11 as an equivalent to maximum allowable
12 concentration or threshold limit value, and they
13 didn't mean it so much as to say that I believe
14 that this is safe to say that this is a level
15 that is where the safety line is being drawn, the
16 level not to be exceeded, so sometimes they were
17 a little bit sloppy in the use of the word safe,
18 but that doesn't come up much.

19 Q. To what extent did the unreliabilities,
20 as you have defined it, with respect to the TLV
21 of five, to what extent was that unreliability

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1 discussed in the literature prior to 1958, if you
2 recall?

3 MR. FISCHER: Objection to the form and
4 foundation.

5 A. Well, I make reference to a number of
6 things in Chapter 4 where it was discussed. Some
7 of these are articles in 1952 and 1956 published
8 in this country that raised concern that if you
9 have a toxic substance for which the occupational
10 exposure limit has been set based on some other
11 effect than cancer, but the substance also is
12 known to cause cancer, you cannot assume that the
13 occupational exposure limit is going to protect
14 people from cancer. It wasn't developed for
15 that, and both of those articles by Dr. Mayers in
16 1952 and by Warren Cooke in 1956 specifically
17 mention asbestos as one of these agents that
18 causes cancer.

19 Q. So the TLV that you spent some time
20 talking about with Mr. Fischer of five, that was
21 supposedly promulgated in 1946 and then in effect

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1 for some period of time thereafter was not
2 designed to and did not in fact address the risk
3 of cancer?

4 A. Right.

5 MR. FISCHER: Objection. Form.
6 Foundation.

7 A. That's right.

8 Q. Was that fact known, the fact that the
9 TLV of five did not address cancer, was that a
10 fact that was addressed in the publications?

11 MR. FISCHER: Objection. Foundation.

12 A. Yes. Eventually it was.

13 Q. You have talked a number of times
14 referencing Dr. Vorwald's cautionary statement to
15 Owens-Illinois to the effect that they should not
16 rely upon any prescribed standard. Do you know
17 what year that was, that admonition?

18 A. 1951.

19 MR. FISCHER: Objection to form.

20 A. 1951.

21 Q. Was that in connection with respect to

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1 a report from the Saranac lab to Owens-Illinois
2 on the very same Kaylo studies?

3 A. That was a report on the industrial
4 hygiene survey of the plant where Kaylo was
5 manufactured.

6 Q. You were asked if you had any
7 information or had any opinion as to whether any
8 member of the committee that set those TLVs was
9 corrupt, and you said you had some problem with
10 that word.

11 Let me ask you this: Is there any
12 information to the effect that anybody on that
13 committee suffered from a lack of objectivity?

14 MR. FISCHER: Objection. Form.
15 Foundation.

16 A. Well, I don't know if I'd put it quite
17 like that. It is just that some of these people
18 had, like in the case of Dr. Drinker, the
19 industrial hygienist, he had connections with the
20 oil industry. He was a consultant to the
21 American Petroleum Institute, and when he was on

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1 the TLV Committee in 1947 as one of the five
 2 members of the committee, he was also writing
 3 memos to the oil companies or contacting the oil
 4 company doctors in the oil industry saying that
 5 if you've got a problem with any of these
 6 occupational exposure limits, let me know, and if
 7 they are too severe, I will see if I can do
 8 something about that for you.

9 MR. FISCHER: Objection to the
 0 narrative, nonresponsive nature of
 1 Dr. Castleman's answer.

2 Q. Are those facts addressed and
 3 identified in your book also?

4 A. Not the last one. That came up more
 5 recently, the Drinker matter.

6 Q. Dr. Vorwald conducted some studies on
 7 behalf of some asbestos manufacturers, I believe
 8 it was the Quebec Association or Asbestos Mining
 9 Association and Johns-Manville in the late 1940s,
 0 early 1950s?

1 A. In the early '50s.

1 TLVs, do you have any information whether or not
 2 those preliminary results were disclosed by
 3 Dr. Vorwald?

4 MR. FISCHER: Objection. Form,
 5 foundation, relevance.

6 A. I don't understand what you are asking
 7 me.

8 Q. Do you know whether or not besides not
 9 being published, the existence of those studies
 10 and/or their tentative results were disclosed
 11 among industry members like Owens-Illinois, for
 12 example?

13 MR. FISCHER: Objection. Form,
 14 foundation.

15 A. I still don't know what you are getting
 16 at. I don't understand.

17 Q. Do you know whether or not Dr. Vorwald
 18 ever disclosed -- strike that.

19 Was Dr. Vorwald a member of the
 20 committee that sat and/or approved any of the
 21 TLVs?

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1 MR. FISCHER: Objection to form and
 2 relevance.

3 Q. What were the tentative results of
 4 those studies?

5 MR. FISCHER: Objection. Foundation,
 6 form, vague, relevance.

7 A. The findings were that the animals
 8 exposed to asbestos had 5.7 times as much lung
 9 cancer as the animals that were not exposed to
 0 asbestos.

1 Q. What is the basis -- I'm sorry.

2 A. The studies were never published.

3 Q. How did you go about determining the
 4 existence and the substance of those studies?

5 MR. FISCHER: Objection. Relevance.

6 A. Dr. Schepers, one of the later
 7 directors of the Saranac Laboratory, ultimately
 8 found some of this information and published it
 9 many years later. 1995.

0 Q. With respect to your investigation of
 1 the setting and continued acceptability of the

1 A. Yes. He was on the TLV Committee from
 2 1950 or '51 to 1956.

3 Q. In connection with his membership on
 4 that committee, do you have any documents
 5 indicating that he ever in connection with that
 6 membership disclosed his tentative results to any
 7 of the other committee members?

8 MR. FISCHER: Objection to form.
 9 Foundation and relevance.

10 A. The cancer studies, no.

11 Q. Do the documents or do you have any
 12 information from any source as to what
 13 Dr. Vorwald's position was with respect to the
 14 need to incorporate -- strike that.

15 Do you have any information as to the
 16 extent to which Dr. Vorwald openly recommended
 17 that the TLV be adjusted because of his tentative
 18 results with respect to those cancer studies?

19 MR. FISCHER: Objection. Form,
 20 foundation, relevance.

21 A. I don't know of any public disclosure

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1 he ever made about the cancer studies.
 2 Q. What has your investigation shown as to
 3 the circumstances surrounding the failure of
 4 Dr. Vorwald or Saranac to complete those
 5 particular studies?
 6 MR. FISCHER: Objection. Form,
 7 foundation, relevance.
 8 A. Well, it seems as if the studies were
 9 completed. They just weren't published, the
 10 cancer studies.
 11 Q. Do you have any information as to why
 12 those studies were not published?
 13 MR. FISCHER: Objection. Foundation.
 14 A. Because they reflected adversely on the
 15 asbestos industry. Vorwald was a consultant to
 16 the asbestos industry. There was even a comment
 17 that appears in the files of Turner & Newell that
 18 the companies pulled the plug on the studies when
 19 they saw the studies coming out wrong.
 20 Q. And who is Turner & Newell?
 21 MR. FISCHER: Objection. Relevance.

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1 A. A big asbestos company in England.
 2 There is a memo I referred to that was written by
 3 their company doctor.
 4 Q. Generally speaking, do you have any
 5 information to the effect that other studies were
 6 either not begun or, if begun, were not completed
 7 because there was a thought that they would
 8 result in negative findings, namely that there
 9 was a causal relationship between asbestos and
 10 asbestosis, cancer and the mesothelioma?
 11 A. Yes.
 12 MR. FISCHER: Objection. Form.
 13 Foundation.
 14 Q. Can you give us another example besides
 15 the Vorwald?
 16 MR. FISCHER: Objection to form.
 17 A. The Asbestos Textile Institute
 18 considered the idea of doing a study on cancer
 19 and asbestos, and it was voted down six to two
 20 according to the 1957 minutes on the Asbestos
 21 Textile Institute.

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1 Q. How about Saranac? Was Saranac ever
 2 retained by the asbestos industry including
 3 Johns-Manville with respect to any possible or
 4 prospective studies?
 5 MR. FISCHER: Objection. Form,
 6 foundation, relevance, vague.
 7 A. They were mostly retained by JM and the
 8 other asbestos companies to do experimental
 9 animal studies, not so much human data. They did
 10 get involved in the evaluation of specific cases
 11 that were appearing for compensation in Quebec.
 12 Q. Those animal studies, were they
 13 supervised by Dr. Gardner in the late 19 -- the
 14 early 1940s?
 15 MR. FISCHER: Objection. Relevance.
 16 Foundation.
 17 A. Right. Gardner was in charge in the
 18 late '30s and the early '40s, and then he died in
 19 1946, and Vorwald came on board the next year.
 20 Q. Did he leave records at Saranac
 21 summarizing his at least tentative results of

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1 those animal studies?
 2 MR. FISCHER: Objection. Form.
 3 Foundation.
 4 A. Yes. Gardner has some records of --
 5 Gardner's studies have been found not necessarily
 6 at Saranac but sometimes in the files of
 7 Johns-Manville, Turner & Newell and else where.
 8 Q. Do you have a recollection as to the
 9 percentile of asbestosis found in mice in those
 10 animal studies by Dr. Gardner?
 11 MR. FISCHER: Objection. Form,
 12 foundation, vague.
 13 A. Asbestosis they reproduced the same as
 14 with people. Cancer was probably the more
 15 controversial finding in the study that Gardner
 16 wasn't really asked or authorized to do by the
 17 asbestos companies, and he found 81.8 percent of
 18 the animals in this particular group had lung
 19 cancer.
 20 Q. Do you know --
 21 MR. FISCHER: Objection to the

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nonresponsive nature.

Q. Do you know when he found that 81.8 percent?

MR. FISCHER: Objection. Form.

A. It was reported to Johns-Manville and the other sponsoring companies in February of 1943.

Q. Do you know if that was ever published, that finding of 81.8 percent of lung cancer in mice?

MR. FISCHER: Objection. Form, foundation, relevance.

A. Not before the 1980s. The claim came up in legal discovery.

MR. QUEENEY: Nothing else.

EXAMINATION BY MR. FISCHER:

Q. Dr. Castleman, are you aware that this case is set for trial January 28th?

A. It is probably on my calendar. I haven't really -- I don't know.

Q. Have you indicated to anyone that you

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1 sentence in order to give it any kind of flavor.

2 Q. We will get to that, but those words
3 are in the conclusion, right?

4 MR. QUEENEY: Objection.

5 A. Conclusion number 4 says since we found
6 only three cases of asbestosis in people with
7 more than 20 years in the trade such as pipe
8 covering, it can be considered not a very
9 dangerous trade, or words to that effect. That's
10 what they said.

11 Q. Let's see if we can agree on the
12 language, Doctor. Since each of the three cases
13 of asbestosis worked at asbestos pipe covering in
14 the shipyard for more than 20 years, it may be
15 concluded that such pipe covering is not a
16 dangerous trade, right?

17 A. Right.

18 Q. They also said pipe covering was a
19 relatively safe occupation, right?

20 A. I don't recall them saying that.

21 Q. Do you dispute that they did?

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are not available to come and testify at the trial?

A. No. I expect to be available.

Q. You don't have any overseas trips planned over the course of the next two months?

A. Not until March.

Q. But in March you do; is that right?

A. Maybe March or April I am going back to India.

Q. Is there anything else on your calendar that would preclude you from coming to trial that you are aware of as you sit here now?

A. No.

Q. One of the published pieces of literature available in 1946 was the Fleischer-Drinker report, right?

A. Right.

Q. And the Fleischer-Drinker report included that pipe covering is not a dangerous occupation, right?

A. Well, you need to read the whole

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1 A. I just don't recall where they said
2 that.

3 Q. You have characterized the
4 Fleischer-Drinker report as giving the pipe
5 covering trade a rather clean bill of health,
6 right?

7 A. Right.

8 Q. And that was something that Mr. Hazard
9 had read; is that right?

10 A. Evidently.

11 Q. You have read Mr. Hazard's transcript,
12 right?

13 A. Not for a long time, but, yes, I recall
14 him referring to it.

15 Q. In fact, he said that he had read the
16 Fleischer-Drinker report, right?

17 A. Right.

18 Q. He said that he had relied on it,
19 right?

20 A. I believe so.

21 Q. He said that Phil Drinker had been his

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1 professor at Harvard, right?

2 A. I don't remember that, but that sounds
3 right.

4 Q. And that one of the reasons that he
5 read that report was because he had had an
6 association with Drinker, right?

7 A. Again, I don't recall these details,
8 but I am not disputing it.

9 Q. You mentioned a gentleman by the name
10 of Hemeon, right?

11 A. Right.

12 Q. The Hemeon report was never published,
13 right?

14 A. Right.

15 Q. And you have no evidence that it ever
16 came into the possession of Owens-Illinois,
17 right?

18 A. Right.

19 MR. QUEENEY: Objection.

20 Q. Mr. Queeney asked you some questions
21 about cancer without distinguishing among the

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1 different kinds of cancer.

2 Do you recall his questions?

3 A. No.

4 Q. During the questions that Mr. Queeney
5 just asked you, do you recall testifying about a
6 1949 statement that found lung cancer with
7 asbestosis?

8 A. Oh, I recall my answer then about the
9 editorial.

10 Q. And that was lung cancer found in
11 connection with the disease asbestosis, right?

12 A. Right.

13 Q. We agree that there was nothing in the
14 published literature about an association between
15 asbestos exposure and colorectal cancer prior to
16 1964, right?

17 A. Correct.

18 Q. We also agree that cancer is a very
19 broad term, right?

20 A. Right.

21 Q. Cancer can arise in virtually every

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1 organ of the body, right?

2 A. I suppose.

3 Q. And different agents cause different
4 kinds of cancer, right?

5 A. Right.

6 Q. And asbestos exposure has been shown
7 not to cause cancers that arise in many organs,
8 right?

9 A. Well, I don't know that you can say
10 that, but asbestos has not been associated with
11 cancer in many organs. It has been associated
12 with cancer in some organs but not all.

13 Q. The Doll study in 1955 was the first
14 epidemiological study demonstrating a causal link
15 between asbestos exposure and lung cancer, right?

16 A. I don't think so. For example, the
17 report by Breslow and his co-workers the year
18 before published in the American Journal of
19 Public Health showed a high association of --
20 well, what they did was they had high association
21 between lung cancer and occupations classified as

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1 asbestos worker, boilermaker and steamfitter,
2 and, of course, there's the earlier data from the
3 British Government which might not technically
4 count as an epidemiological study but really is
5 very strong statistical evidence.

6 Q. Is it fair to say, Doctor, that the
7 Doll study is commonly regarded as the defining
8 epidemiological study with regard to the
9 association between asbestos exposure and lung
10 cancer?

11 A. It is regarded as a study which
12 established beyond any reasonable doubt that
13 asbestos caused lung cancer. There were plenty
14 of other studies suggesting that earlier.

15 Q. You are aware that there is a
16 continuing dispute in the medical literature
17 about whether or not the disease asbestosis is
18 necessary to attribute lung cancer to asbestos
19 exposure?

20 A. Well, I think that is in a class -- I
21 would call that tobacco science. If there's

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enough money on the table, there's going to be somebody publishing a medical article to make a certain kind of claim, but I don't think that there is any basis, any credible scientific basis for maintaining that you have to have asbestosis to be a candidate for occupational lung exposure to asbestos.

Q. You are aware, Doctor, that there is a dispute in the published medical literature on that point, right?

A. I realize there are people that publish opinion pieces along those lines, yes.

Q. And those published articles indicating that the authors believed that the disease asbestosis was necessary before attributing lung cancer to asbestos exposure have appeared in peer-reviewed journals, right?

MR. QUEENEY: Objection. Asked and answered.

A. Yes. There have been a few such articles or opinion pieces published.

1 Q. The Dreessen study was conducted in the
2 textile plant, right?

3 A. Yes.

4 Q. It was not an Owens-Illinois plant,
5 right?

6 A. Right.

7 Q. And Fleischer-Drinker eight years later
8 says that the character of the asbestos pipe
9 covering industry is substantially different than
10 the character of the textile industry working
11 with asbestos, right?

12 A. Right.

13 Q. And Fleischer-Drinker says that the
14 conclusions drawn from the textile industry
15 should not be applied to the pipe covering
16 industry, right?

17 A. Well, they made some vague statements
18 along those lines, yes.

19 Q. As a matter of fact, they say the
20 character of asbestos pipe covering industry on
21 board naval vessels is such that the conclusions

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Q. You talked about the Dreessen study in 1938, right?

A. Yes.

Q. The Dreessen study was relied upon by industrial hygienists after it was written, right?

A. I suppose it was some use to some industrial hygienists, yes.

Q. The Dreessen report was published under the auspices of the United States Public Health Service, right?

A. Yes.

Q. It was the best available data at the time?

MR. QUEENEY: Objection to the form of the term "best available data".

A. It was maybe not the best available data, but it was a substantial edition to the available data at the time. As I mentioned, the Pennsylvania study had preceded it by several years and also had very important data.

1 drawn from other asbestos industries such as
2 textiles cannot be applied?

3 A. Right. It is not really clear what
4 conclusions they are talking about.

5 Q. Those were their words?

6 A. Right.

7 Q. With respect to threshold limit values,
8 Doctor, you are aware that 43 states incorporated
9 those TLVs into their state law?

10 A. I don't know how many, but a number of
11 states did.

12 Q. The substantial majority of states?

13 A. I don't even know. It depends what
14 period of time you are talking about. Maybe you
15 mean by 1970 or so. Maybe by then. I don't
16 know. I have given some statistics in my book
17 about how many states had done it by 1945. I
18 don't know about what happened much after that.

19 Q. The Federal Government also
20 incorporated the TLVs into the Walsh-Healey Act,
21 right?

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1 A. Right. To try and put some kind of
 2 occupational health standards for Government
 3 contracting companies, employees.
 4 Q. And --
 5 A. That was before OSHA.
 6 Q. Right. And the Federal Government when
 7 it passed the Walsh-Healey Act essentially
 8 required that the TLV of five million particles
 9 per cubic foot for asbestos be followed on
 10 federal contract jobs, right?
 11 A. Well, it basically said that that's
 12 what should be done. What happened was probably
 13 another story, but that's right. Another case of
 14 publishing regulations in the Federal Register.
 15 Q. Federal Government passed that law and
 16 said that TLV of five million particles should be
 17 followed, right?
 18 A. Right.
 19 Q. And that was in the 1960s, right?
 20 A. Right. That was a regulation published
 21 in 1960.

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1 Q. The TLV of five million particles per
 2 cubic foot was not reduced until 1969; is that
 3 right?
 4 A. Something like that.
 5 Q. No one prior to 1969 ever published a
 6 TLV for asbestos that was lower than five million
 7 particles per cubic foot?
 8 A. Well, it was only the ACGIH publishing
 9 TLVs. No one published TLVs but them, and they
 10 really weren't about to be importuned by people
 11 criticizing the TLV. There were plenty of
 12 criticisms at the Selikoff conference in 1964
 13 that seemed to not meet with any kind of
 14 immediate response from the TLV Committee.
 15 Q. Nobody ever published a guideline limit
 16 for asbestos prior to 1969 that was lower than
 17 five million particles per cubic foot, right?
 18 A. No one was supposed to have done this.
 19 Other countries for the most part didn't set
 20 occupational exposure limits the way we did in
 21 the U.S., and the only game in town in the U.S.

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1 was the TLV Committee of the ACGIH. There
 2 weren't separate Governmental entities doing
 3 this. They had basically ceded the territory by
 4 all the state agencies who found it convenient to
 5 not having to hire so many doctors and medical
 6 people in order to take up this unpleasant job of
 7 setting their own state exposure limits.
 8 Q. We agree then that no one published an
 9 asbestos exposure limit lower than five million
 10 particles per cubic foot prior to 1969, right?
 11 A. Right.
 12 MR. QUEENEY: Objection to the form of
 13 the question with respect to publishing a TLV.
 14 Vague.
 15 Q. Mr. Queeney asked you some questions
 16 about a study done at Saranac that was
 17 underwritten by Johns-Manville. Do you remember
 18 those questions?
 19 A. Yeah.
 20 Q. That was the study you mentioned where
 21 there had been findings of cancer but it wasn't

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1 published, right?
 2 A. Right.
 3 Q. That was an animal study, right?
 4 A. There were actually two of them, one
 5 done and reported in 1943 and the other one first
 6 reported as an interim report in 1952.
 7 Q. The animals in that experiment were
 8 exposed to raw asbestos, right?
 9 A. Right.
 10 Q. That was different than the Kaylo
 11 experiments?
 12 A. Right.
 13 Q. The animals in the Kaylo experiments
 14 were subjected to Kaylo dust, right?
 15 A. Right. Which contained 15 or so
 16 percent of asbestos.
 17 Q. You have no evidence or information
 18 that Owens-Illinois ever received a copy of
 19 Gardner's writeup of those raw asbestos studies;
 20 is that correct?
 21 A. That's right.

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1 Q. You have no evidence or information
2 that the results with respect to cancer were ever
3 communicated to Owens-Illinois, right?

4 A. That's correct.

5 Q. The Kaylo experiments that were done at
6 Saranac, there was no cancer that developed in
7 any of those animals, right?

8 A. I believe that's right.

9 Q. There's no evidence or information that
10 Owens-Illinois had anything to do with the raw
11 asbestos studies at Saranac, correct?

12 A. I think we pretty well covered that,
13 that they were not among the sponsoring
14 companies.

15 Q. You mentioned that Drinker was a
16 consultant to the oil industry while he was
17 working in the public health field, right?

18 A. Well, he was on the TLV Committee.

19 Q. While he was on the TLV Committee,
20 being a consultant in the industry in itself
21 doesn't make a person corrupt, right?

1 years, and then the Italians cited that Fleischer
2 and his co-workers were the discoverers of
3 asbestos hazards and shipyard workers, so, no, I
4 don't think there was criticism of it published.
5 It was pretty much ignored from what I can tell.

6 Q. The Saranac studies that were done for
7 Owens-Illinois were not designed to determine
8 what a safe level of exposure would be, right?

9 A. Right. They only tested one level of
10 exposure, and they got plenty of disease at that
11 level of exposure. You can't extrapolate what
12 level would be safe for guinea pigs, for example.

13 Q. And the level of exposure was massive,
14 right?

15 A. It was high.

16 Q. It was over a hundred million particles
17 per cubic foot, right?

18 A. Right.

19 Q. And the guinea pigs were exposed for
20 their entire lifetime?

21 A. I think so.

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1 A. Correct.

2 Q. OI was not a member of the ATI, right?

3 A. No, they were not.

4 Q. I'm sorry. That is the Asbestos
5 Textile Institute, right?

6 A. Right.

7 Q. OI was not a member of the QAMA, right?

8 A. Right.

9 Q. You have no information that Hemeon
10 ever communicated the results of his unpublished
11 paper to Owens-Illinois; is that right?

12 MR. QUEENEY: You mean directly?

13 A. That's right.

14 Q. You are aware of no published criticism
15 of the Fleischer-Drinker study until Selikoff's
16 results in 1964 and '5, right?

17 MR. QUEENEY: Objection to the form of
18 the question. What do you mean by criticism? A
19 question as to the legitimacy of some portion of
20 it?

21 A. It just wasn't cited by anybody for 10

1 Q. The experiment was designed to discover
2 whether or not Kaylo dust was inert, right?

3 A. Well, whether it was harmful. They
4 weren't expecting to discover that it was inert.
5 Had silica had asbestos in it, it would have been
6 quite a discovery to find that it was inert.

7 Q. In fact, in two of the interim reports
8 they propertyed that it wasn't, correct?

9 A. Initially they didn't produce any
10 reactions, but they were dealing with dusts that
11 had a latency period, a well established delay
12 onset effect. You know, it is like jumping off
13 the top of a 30-story building. You know, for
14 the first three floors you don't feel a thing.

15 Q. Is it your testimony, Doctor, that the
16 Saranac Lab did not communicate to Owens-Illinois
17 that it appeared that the Kaylo dust was in fact
18 inert?

19 MR. QUEENEY: Objection to the form of
20 the question.

21 A. I think they used language to that

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1 effect in the early reports, but they were just
2 early reports.
3 Q. Do you know whether Saranac expressed
4 an opinion as to whether or not when the
5 experiments were completed they would find that
6 the Kaylo was in fact inert?
7 A. They may have said something about it
8 on the early reports. It doesn't really matter
9 what they said before 1948. After 1948 the
10 product came up spades, and they repeatedly told
11 that to Owens-Illinois.
12 Q. Doctor, it's true that the Saranac
13 experiments on Kaylo dust established that the
14 silica dust had lost its capacity to irritate
15 tissue, right?
16 A. Well, they didn't find most -- most of
17 the effect they found was from the asbestos, not
18 from the silica, so I guess maybe that's true. I
19 don't recall exactly what they said about silica.
20 MR. FISCHER: That's all I have for
21 you, Doctor.

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1 EXAMINATION BY MR. QUEENEY:
2 Q. One simple question. You referred to a
3 conclusion number 4, and there's two parts of
4 conclusion number 4 that you reference.
5 A. We read the whole thing in.
6 Q. Can you explain the distinction between
7 the first part and the last part of conclusion
8 number 4?
9 MR. FISCHER: Objection to the form.
10 A. The first part he said we found
11 asbestosis in people with more than 20 years
12 exposure to these products, and then he says at
13 the end of the sentence it doesn't seem to be
14 that big of a problem, and those two, it seems to
15 me, are internally inconsistent. The sentence is
16 internally inconsistent.
17 Q. How many people did they study with
18 more than 20 years exposure?
19 A. They don't say. They said there were
20 517 with more than 10 years of exposure, and the
21 only cases they report are in three individuals

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1 with more than 20, and we don't know how many of
2 the 51 had more than 20. Simply that information
3 wasn't disclosed.
4 Q. A hundred percent of the three people
5 over 20 years did in fact have asbestosis?
6 MR. FISCHER: Objection to form.
7 Foundation.
8 A. Another way of looking at it, I
9 suppose.
10 MR. QUEENEY: Thank you.
11 (Examination concluded -- 4:41 p.m.)
12 -----
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1 STATE OF MARYLAND SS:

2 I, DEBORAH C. D. SHUMAKER, a Notary Public
3 of the State of Maryland, do hereby certify that
4 the within named, personally appeared before me
5 at the time and place herein set out, and after
6 having been duly sworn by me, was interrogated by
7 counsel.

8 I further certify that the examination was
9 recorded stenographically by me and this
10 transcript is a true record of the proceedings.

11 I further certify that the stipulations
12 contained herein were entered into by counsel in
13 my presence.

14 I further certify that I am not of counsel
15 to any of the parties, nor an employee of
16 counsel, nor related to any of the parties, nor in
17 any way interested in the outcome of this action.

18 As witness my hand and notarial seal this
19 ^ day of ^MONTH, 2002.

20 My commission expires

21 July 1, 2002 Notary Public